LEATH & ROSS,

THE OLD-ESTABLISHED

HOMŒOPATHIC CHEMISTS & PUBLISHERS,

9 VERE ST., OXFORD ST., W. (WHOLESALE DEPARTMENT)
AND 5 ST. PAUL'S CHURCHYARD, E.C. **LONDON.**

SPECIAL TRADE NOTICE.

OUR

£5

Handsome and Attractive

CASE

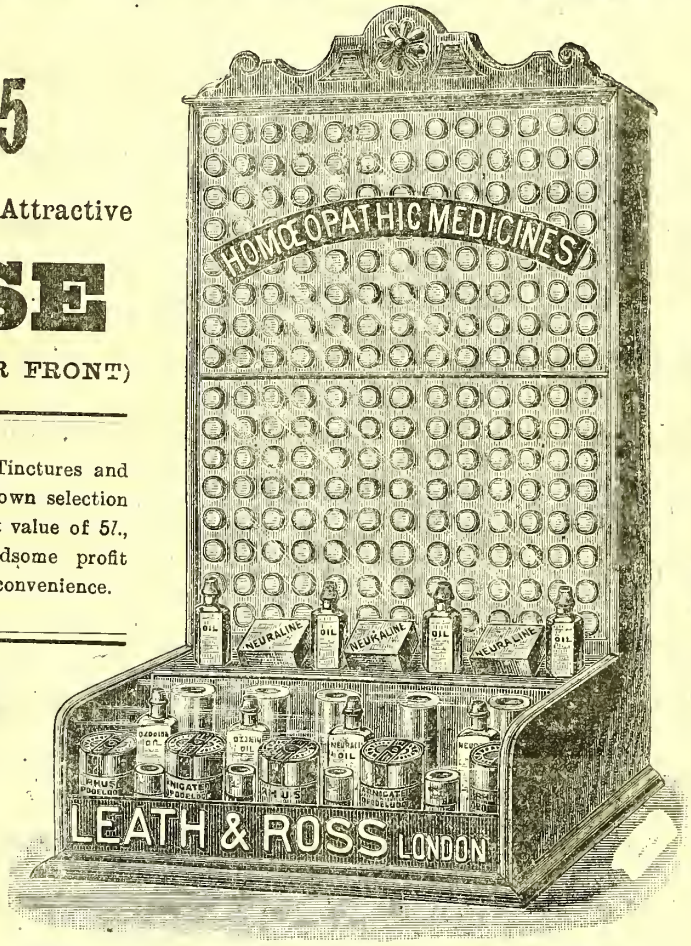
(OPEN BACK OR FRONT)

Fitted complete with Tinctures and Pilules (to customers' own selection if required) to the Net value of 5*l.*, thus yielding a handsome profit without trouble or inconvenience.

NO CHARGE

Whatever for

THE CASE



OUR

TINCTURES, PILULES, AND CAMPHOR

Are in great demand everywhere.

1/- Size

3/6 per doz. Cash

9d. size, **2/9** ,,
6d. size, **2/-** ,,

DIMENSIONS—
Length, 19¾ in.
Width (from back to front), 11¾ in.
Height, 32½ in.

When ordering, kindly say if the Case is required to open back or front.

Other Agents' Cases at £3 3*s.*, £4 4*s.*, £6 6*s.*, £10 10*s.*, and £21. All the Cases can be had in Mahogany, Walnut, or other Fancy Wood to match Shop Fittings, and fitted with 6*d.* and 1*s.* stock, 9*d.* and 1*s.* stock, or all 1*s.* stock, as preferred.

THE ABOVE VERY HANDSOME AND IMPROVED BENT-GLASS

CHEMIST'S COUNTER SHOW-CASE

Stands unrivalled for style, convenience, and beauty; occupies but a small space on the counter; is made to open back or front, to suit the convenience of the purchaser and the position it is intended to occupy. It is a splendid advertisement, attracting the notice of all customers—proves a great source of profit to all who possess it. Our Medicines are known all over the world, and are in great demand everywhere. More than 2,500 Chemists in the United Kingdom alone stock them, besides having Agencies in nearly all the British Colonies, in India, Africa, New Zealand, China, and other parts of the world.

TELEGRAPHIC ADDRESS—"TROCHES MANCHESTER."

JUJUBES & PASTILLES

SEASON 1892.

WE invite the attention of Chemists to our products in this department. We court a business-like comparison with other makers, both in the matter of quality and prices, and for this purpose will send Free Samples to any qualified Chemist upon receipt of business card. We think the public would rather purchase these goods from the Chemists than from Grocers, Confectioners, and other outside distributors, and although we neither call upon these nor solicit their favours in any manner whatever, we have from time to time to decline their orders, because we manufacture for the Drug Trade only. We respectfully ask Chemists to support us in our endeavour to keep within the proper channel of distribution those lines which may be fairly considered to belong to the legitimate trade. As intimated above, our prices are not higher than those makers who sell their wares indiscriminately, and we leave our Free Samples to be judged upon their merits.

BLYTON, ASTLEY & CO.

MANUFACTURING PHARMACISTS, MANCHESTER.

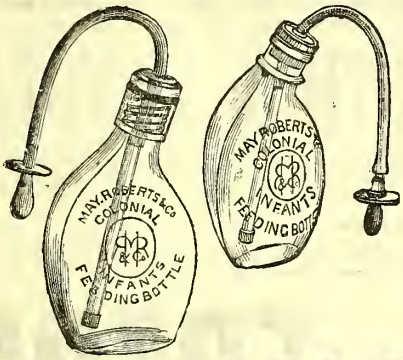
PLEASE WRITE FOR OUR GENERAL PRICE LISTS. PERUSAL WILL REPAY YOU.

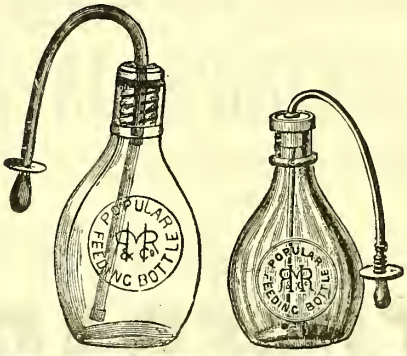
CAN YOU BUY THEM CHEAPER?

£1 worth or more, 5% disct.

£5 worth or more, 5% disct. & Carriage Paid.

COLONIAL **POPULAR**





FEEDING BOTTLES.

If with White Glass Bottles, 2/ gross extra.	Each in Card Box.	In Boxes of 1 Dozen.	Loose in Cask (free).
	Per Gross.	Per Gross.	Per Gross.
Green Glass, Wood Top, White Fittings	34/	28/	23/
Do. do. Black Fittings	37/	31/	26/
Do. Screw Glass, White Fittings	39/	33/	29/
Do. do. Black Fittings	42/	36/	32/

MAY, ROBERTS & CO., LONDON.

Telegraphic Address—"FEEDING BOTTLES LONDON."

PRICE LIST OF DRUGGISTS' SUNDRIES, &c., POST FREE.

SOZIO & ANDRIOLI

(Alpes Maritimes) GRASSE (France). [ESTABLISHED A.D. 1757.

SPECIALITIES: Oils of Neroly, Lavender, Geranium (twice rectified on Rose Flowers), Thyme (red and white), Spike Lavender, Rosemary, Patchouly, Sandal Wood, &c., &c.

ONLY MAKERS OF THE CELEBRATED ORRIS ROOT OIL, crystallizing at +15° Réaumur.

Flowers Pomades at the highest possible Saturation. Best Brand for Orange Flowers and Rose Water. Concentrated Essences, Sweet Almond Oil, &c. Stock kept in London.

London Agent—MR. FREDK. BOEHM, 4 CULLUM ST., E.C.

COCKING'S JAPAN OIL OF PEPPERMINT.

Our Extra Steam Refined Oil is trebly distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all those polymeric products of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water-white colour retaining its full aroma, pungency, and strength, and guaranteed absolutely pure and soluble in spirits of wine.

COCKING'S JAPAN MENTHOL CRYSTALS.

Our Extra Steam Refined quality is in firm, hard, dry, and snowy-white crystals, entirely free from oily contamination, and therefore of the highest melting-point. As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure Beware of substitutes. For full particulars, therapeutic uses, &c., see special circulars, to be had on application.

Sole Agents—JOHN BATT & CO., 39 OLD BROAD ST., E.C.

TOMBAREL FRÈRES

GRASSE

ALPES MARITIMES FRANCE

DISTILLERS OF ESSENTIAL OILS

Orange, Rose, and Elder Flower Waters,

MANUFACTURERS OF

FLOWER POMADES, PERFUMED OILS, FLOWER EXTRACTS.

SPECIALITY OF THE HOUSE: CONCRETE FLOWER ESSENCES (ESSENTIAL OILS).

Special Products for Manufacturing Perfumers and Toilet Soap Makers.

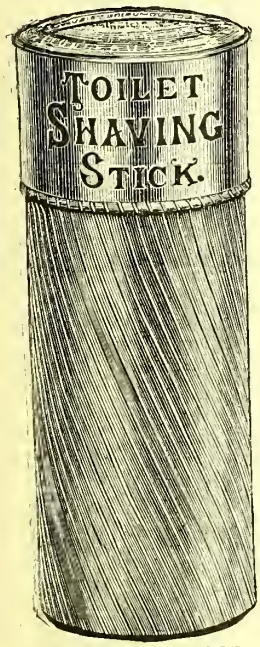
ALMOND AND OLIVE OILS.

PRICE LIST ON APPLICATION.

Depot and Agency—BARLIN & FIELD, 16 MARK LANE, LONDON, E.C.

"Vinolia" Soap.

NATURAL, CREAMY, DEMULCENT, PURE, SUPERFATTED.



TOILET, 1/-, 1/6, and 2/6.

FINE SCENTS.

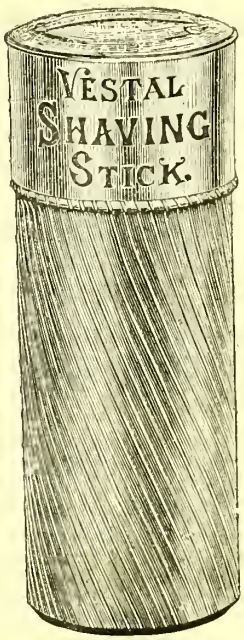
FINE FATS.

TOILET, 2/-.

VESTAL, 4/6.

FINE MAKE.

FINE SOAP



VESTAL, 2/6.

Delightfully perfumed, perfectly neutral, & gives an abundant lather."—*Chemist & Druggist.*

BLONDEAU et CIE., Ryland Rd., London, N.W.

American Depot—73-77 WATTS STREET, NEW YORK.

EAU DE COLOGNE

OF THE MOST ANCIENT DISTILLER,

JOHANN MARIA FARINA,

Opposite the Julichs Place, COLOGNE,

ESTABLISHED A.D. 1709.

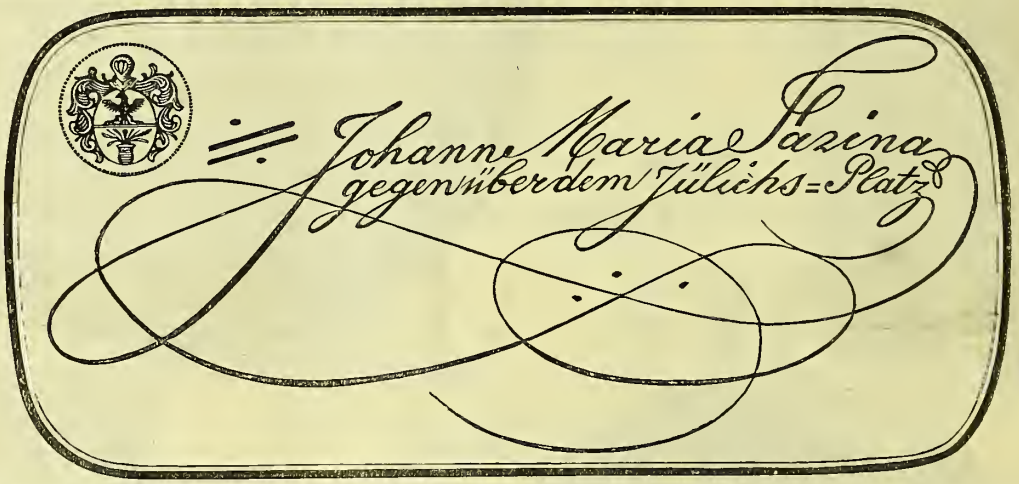
PRIZE MEDALS:—LONDON, 1851 AND 1862 OPORTO, 1865; PARIS, 1867; VIENNA, 1873.

By appointment, Sole Purveyor to Her Most Gracious Majesty Victoria, Queen of Great Britain & Ireland; Their Royal Highnesses the Prince and Princess of Wales; Albert II., King of Saxony;

Their Majesties, William II., German Emperor and King of Prussia; Alexander II., Emperor of Russia; Francis Joseph, Emperor of Austria; Lewis, King of Portugal.

In consequence of increasing inquiries from the Colonies for my Eau de Cologne, the only genuine, I beg to submit my Price Current.

At the same time I beg to call special attention to the ollowing facsimile of my Trade Mark, for the protection of which I have instituted thirteen suits in the High Court of Chancery, all of which have been decided in my favour.



All similar Labels being more or less imitations of the same, I shall proceed as before against all persons selling or exposing for sale any such imitations.

I only prepare one quality of Eau de Cologne. This quality never varies in the slightest degree, and there has not been the smallest change in the manufacture since the year 1709, when it was invented by my ancestor.

Orders equal to at least 12 dozen short bottles will be promptly executed at 13*s.* 6*d.* per dozen, against my bill drawn at three months from the date of invoice, delivered free on board the export ship, at Rotterdam Antwerp, Hamburg, or Bremen, no charge being made for the case and packing, but insurance charged extra $7\frac{1}{2}$ per cent. discount is allowed for orders equal to at least 100 dozen, but on no smaller quantities.

I may add that, as I do not draw on the Colonies, all Orders must be accompanied by a credit on some London House, or permission to draw on same at three months.

The Goods can also be shipped in transit through London at a very small additional expense, full particulars of which may be obtained of my Sole Agents for Great Britain and Ireland :—

MESSRS. J. & R. McCRACKEN,

No. 38 Queen Street, Cannon Street, LONDON, E.C.

The following are the sizes of my bottles :—

No. 1	Long Green Flasks	12 bottles	to one dozen.
„ 2	Short White Bottles	12 „	
„ 3	Double ditto	6 „	
„ 4	Wickered Bottles (small)	8 „	
„ 5	ditto (medium)	4 „	
„ 6	ditto (large)	2 „	

JOHANN MARIA FARINA,

OPPOSITE THE JULICHS PLACE.

COLOGNE: *January*, 1892.

THE NEW JAPANESE SPECIALITIES.

"HASU-NO-HANA" PERFUME.
The Japanese Lotus Lily. A realised dream of the Æsthete. In pretty Japanesque cases, 2s. 6d. and 5s. per bottle.

"HASU-NO-HANA" SOAP.
Unrivalled for the complexion, a veritable balm for the skin. 1s. per tablet.

"HASU-NO-HANA" DENTIFRICE.
Whitens the teeth and sweetens the breath. 1s. per box.

HASU-NO-HANA" SACHET.
For scenting gloves, cabinets, stationery, &c. 6d. and 1s. each.

THE NEW INDIAN SPECIALITIES.

"PHUL-NANA" PERFUME.
A Bouquet of India's Choicest Flowers. Truly Fascinating and Everlasting. 2s. 6d. and 5s per bottle.
N.B.—This highly concentrated Perfume is unique in permanently retaining its full and delightful aroma; and is "par excellence" the best Scent for ball-room or crowded assembly; also for use in Warm Climates.

"PHUL-NANA" SACHET
For the Wardrobe, Desk, Cabinet, &c. The most permanent of dry perfumes.
An Invaluable Aromatic Disinfectant.
6d. and 1s. each.

J. GROSSMITH & SON'S REGISTERED "VERUS NATURÆ" SPECIALITIES
The new Floral Extracts, Concentrated and True to Nature.
LILY OF THE VALLEY, WHITE LILAC, MIMOSA, CHERRY PIE, MAY BLOSSOM, AND NARCISSUS.
Tastefully mounted, each bottle in ideal case, 2s. 6d. and 5s each; also in elegant boxes containing miniature bottle of each six kinds. 1s. 6d and 3s. per box

N.B.—SEND FOR GROSSMITH'S ILLUSTRATED LIST OF NOVELTIES.

MARVELLOUS SUCCESS.
SALE STILL INCREASING.
HIGHEST AWARDS WHEREVER EXHIBITED.
GOLD MEDAL, 1889.
BRONZE MEDAL, 1888.
(HIGHEST AWARD)
SPECIAL AWARD, 1890.
SEE OPINIONS OF THE PRESS, AND TESTIMONIALS FROM ALL PARTS OF THE WORLD.

PETAL DUST. The Great Floral Air Purifier and Everlasting Perfume.
(REGISTERED)

PRICES.

3d.	Size, in Boxes containing	3 dozen	... ...	6s. 0d. per box	Net
6d.	" "	1 "	... ...	3s. 6d. "	
1s.	" "	1 "	... ...	7s. 0d. "	

Order through your Wholesale House, or, CASH WITH ORDER, direct from SOLE PROPRIETORS—
THE ROSMARINE MANUFACTURING CO., LONDON AND PHILADELPHIA.
LONDON OFFICE—54 STAMFORD STREET, LONDON, S.E.
CITY DEPOT—H. C. QUELCH, 1 LUDGATE SQUARE, LONDON E.C.
Sole Agents for India—ROWE & CO., RANGOON.

NOTICE!!

THE FIRM of MARIA CLEMENTINE MARTIN,

NUN

Have been Awarded PRIZE MEDALS for their Celebrated

EAU DE COLOGNE

AT THE FOLLOWING EXHIBITIONS, VIZ:—

LONDON, 1851. RHENISH PROVINCES, 1852. NEW YORK, 1853.
PARIS, 1855. LONDON, 1862.
VIENNA, 1873. SYDNEY, 1879. MELBOURNE, 1880.

Facsimiles of Prize Medals Awarded at London Exhibitions, 1851 & 1862 appear on Label of each Bottle. Without such, None are Genuine.

BEWARE OF IMITATIONS!!

EAU DE COLOGNE of the **"NUN"** (so-called), manufactured by any firm other than the above, is spurious, and an infringement of registered proprietary rights.

PRICE LIST.

	Duty Paid, Net.	In Bond.		Duty Paid, Net.	In Bond
No. 1.—Half Shorts	8/6	5/6	No. 4.—Long Green Flasks	16/-	11/-
No. 2.—Shorts	16/-	11/-	No. 5.—Wickered Bottles (Small)	26/6	19/3
No. 3.—Shorts (finely Wickered)	21/3	16/6	No. 6.—Wickered Bottles (Medium)	53/-	38/6

No. 7.—Wickered Bottles (Large) 106/- duty paid, net; 77/- in bond.

Small Cases assorted to order (of not less than £3 value in bond) delivered free freight, less 7½ per cent. discount.

All Sizes can be obtained through any Wholesale House, or direct from the Sole Agents for Great Britain and Ireland,

C. E. MASON & CO.,

2 BEECH STREET, LONDON, E.C.

LAZELL DALLEY'S

NEW YORK

SACHETS! SACHETS! SACHETS!

HELIOTROPE, VIOLET, WHITE ROSE, JOCKEY CLUB.

The sale of Perfume Sachets is greatly increasing. You cannot do better than stock a well-known brand.

The success of Lazell Dalley's 6*d.* and 1*s.* Sachets has been almost unprecedented. I have sold nearly 1,000 dozen within six months, and the sale is still increasing; when goods sell like this it is a proof that they are appreciated by the public.

Price 6d., 4s. 6d. dozen; 1s., 8/6 dozen; 2s., 16s. per dozen.

OF ALL THE WHOLESALE HOUSES, OR FROM THE IMPORTER,

HENRY C. QUELCH

LUDGATE SQUARE, LONDON, E.C.

HARRISON'S FEATHERWEIGHT

PERFECTION EYE PRESERVERS & READING SHADES

(Registered).

Court Journal says of them—"They are a perfect gem of beauty, lightness, and utility."

XYLONITE EYE CAPS
(*Concave*). *Rights and Lefts.*
Flesh Coloured.
Stop out the Light and Cold without Touching the Eye.

T. H. HARRISON,
40 Hatton Garden, London, E C.

CHARLES DELACRE & CIE.

(Pharmaciens de 1 classe),

WHOLESALE AND RETAIL CHEMISTS AND DRUGGISTS.

CH. DELACRE, PHARMACIEN.
AMB. DELACRE, PHARMACIEN.

ESTABLISHED 1853.

Montagne de la Cour, Brussels.

GENERAL AGENTS

For BELGIUM and HOLLAND for [2]

MESSRS. BURROUGHS, WELLCOME & CO.'S

"Tabloids" and other Productions.

H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-, 10/6, 21/-
Egg Julep, 2/-, 4/-
CONCENTRATED Egg Julep, 2/6, 5/-, 10/6.
Golden Fluid, 10/6, 21/-
EUXURON, 1/6.
&c.

EUCHRISMA.
Combines in one clear Fluid every valuable Component both of a Hair Grease and Wash. 3/6, 5/-, 10/6, 21/-.

EAU RACINE.
For renewing the original colour of Grey Hair; superior to all other Restorers, being perfectly simple in its Components. Price 6/-.

Stimulating Lotion, 5/-, 10/6.
Astringent and Tonic Lotion, 5/-, 10/6.
Quinine and Arnica Hair Wash, 3/6, 5/-, 10/6, 21/-
Arnica Wash, 3/6, 5/-, 10/6.
&c.

An elegant Preparation for the Hair and Beard.
Price 2/6, 3/6, 5/-, 10/6, 21/-.

BRILLANTINE.

H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT.)

PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

R C TREATT

Dunster House Mincing Lane
LONDON

IMPORTER OF

Musk Civet Ambergris Attar-of-Rose

ESSENTIAL OILS

Wholesale and Export only

APPLICATION ON QUOTATIONS AND PRICE LIST

Dorothy Dentifrice

3d. PER PACKET.

An Ideal Tooth Powder.

Dorothy Dentifrice is most attractively put up, and sells readily at sight. It is being extensively advertised in the best publications of the country. Testimonials have been received by the proprietor from the most eminent members of the Dramatic and Musical Profession including Miss Ellen Terry, Mr. Henry Irving, Miss Fortescue, Madame Albani, &c. It is going off well wherever introduced, giving satisfaction to both the trade and the public. It is a profitable line, and is not cut.

2/3 per dozen, 24/- per gross Show Cards with all parcels.

Full particulars of Agencies will be sent to applicants by the Proprietor,
ROSCOE C. SPURIN, 11-13 ST. BRIDE STREET, LONDON, E.C.

PURE OTTO OF ROSE,

SPECIALITY OF

SHIPKOFF & CO.

DISTILLERS AND EXPORTERS,

KIZANLIK, BULGARIA.

Agent for Great Britain—G. P. BAKER, 19 Ivy Lane, LONDON, E.C.

THE OTTO OF ROSE which this house distils and exports is known above all by the absolute purity of its quality and the unexcelled sweetness and strength of its odour. It is guaranteed to be the finest essence produced in the famous Rose Valley of Bulgaria.

Shipkoff's Brand received the only award for Otto of Rose at the Paris Exhibition.

50 YEARS SUCCESS

HOPGOOD'S NUTRITIVE & SEDATIVE HAIR CREAM.

The *only* preparation for the Hair recommended by leading Physicians for the removal of Scurf, allaying irritation, preventing greyness and baldness, and producing a LUXURIANT HEAD OF HAIR.

JOHN A. WALCOTT, M.D., M.R.C.S., says:—"I feel much pleasure in being able to recommend (with confidence) your NUTRITIVE CREAM in all cases of irritation of the scalp, accumulation of dandriff and loss of hair, in each of which I have freely used it with UNFAILING SUCCESS."

In Bottles to Retail at 1/6, 2/6, and 3/6. Revised Wholesale Prices, 12/6, 20/-, 30/- per doz. Supplied by all Wholesale Sundry Houses,

OR FROM THE DEPOT—

OSBORNE, GARRETT & CO., 51 Frith St., Soho., LONDON, W.

EXPORT CHEMISTS' SUNDRIES

Graduated white Glass Measures and Tumblers; Screw-neck, Plain, and Boat-shape Feeding Bottles, Male and Female Glass Syringes, Decorated and plain China Feeding Cups, Bed Pans, tall round white Medicine Phials, Crystal Homœos, Stoppered Bottles, Dressing and Small-tooth Combs, &c., specially suitable for India and Colonies.

HENRY W. BUSH & CO.

MANUFACTURERS AND IMPORTERS,

BURY STREET, ST. MARY AXE, LONDON, E.C.

SHEFFIELD COLLEGE

OF PHARMACY,

PRINCESS BUILDINGS, THE MOOR, SHEFFIELD.

PRINCIPALS { R. B. GREAVES, Ph.C., F.C.S.
J. W. TURNER.

In addition to the successful Minor Students from this College during October, Mr. J. A. Lee, of Mexborough, passed the

MAJOR EXAMINATION

at FIRST ATTEMPT, three months after passing the Minor from here

The Short Course for the January Exam. commences on November 21. Fee, £4 10s.

The Full Term for the April Exam. on January 4. Fee, £3 3s.

PROSPECTUS ON APPLICATION.

JUST PUBLISHED. 200 pp., Crown 8vo. 3s. 6d.

INDIGESTION

A Manual of the Diagnosis and Modern Treatment of the different varieties of Dyspepsia.

By GEO. HERSCHELL, M.D., LOND.

"Any work of this character must stand comparison with a number of able monographs either in English, French, or German. We think Dr. Herschell's book will compare favourably with any of these."—*Therapeutic Gazette*, Jan., 1892.

London: BAILLIÈRE TINDALL & COX.

JUST PUBLISHED.

"THE PRINCIPAL STARCHES USED AS FOOD"

Illustrated by Photo-Micrography, with a short description of their Origin and Characters.

By W. GRIFFITHS, MARKET PLACE, CIRENCESTER.

Price 5/- Will be forwarded by post on receipt of P.O. sent to the above address.

LONDON HOMŒOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.

President—THE LORD EBURY.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homœopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS, *Secretary-Superintendent*

WESTMINSTER COLLEGE

TRINITY SQUARE, BOROUGH, LONDON, S.E.

THE LARGEST PHARMACEUTICAL SCHOOL IN GREAT BRITAIN.

The Course of Lectures and Classes for January Examination has just commenced. Fee, until January Examination, £8 8s. April, £12 12s. Until Qualified, £15 15s. This fee includes all books, apparatus, &c., there being no extras of any kind.

PRELIMINARY. FEE:—£3 3s. until January Examination, or £5 5s. until passed.

EVENING CLASSES

Are held every Tuesday, Wednesday, and Thursday. Full particulars on application.

THREE YEARS' FREE TUITION.

WILLS' UNIVERSAL POSTAL SYSTEM.

This course of instruction is intended to assist those gentlemen who are engaged in business and cannot attend a School of Pharmacy.

For Prospectus and full particulars apply to

E. WALDEN, Secretary.

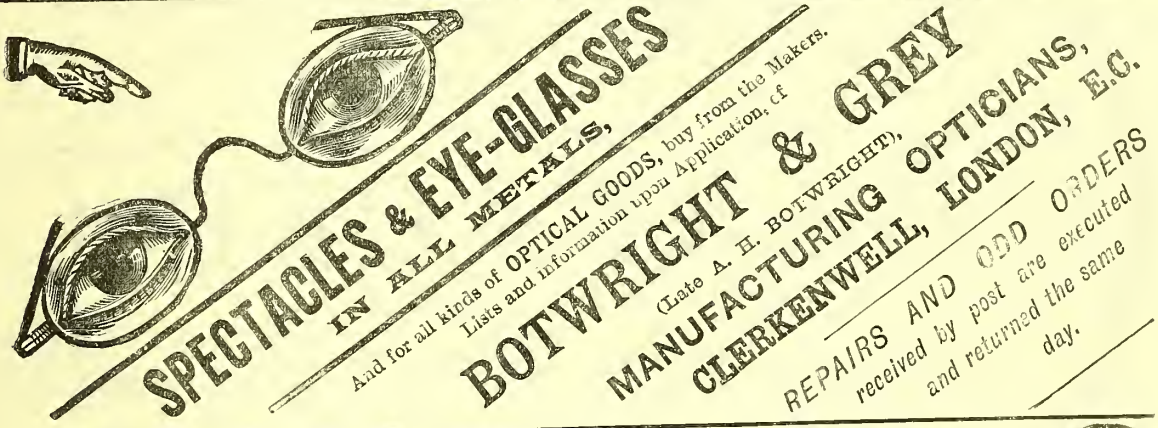
THE "ECONOMIC SERIES"

Of Twelve Botanical Slides, illustrating the Arrangement of the Elementary Tissues.

Specially arranged for the use of Students in Botany and Materia Medica, and designed for instruction and reference. Each Slide is marked with its characteristic feature, so that the Student may know what to look for in his histological practice

10s. 6d. the Set in Case complete. Free by Post.

G. T. W. NEWSHOLME, Sheffield.



Look!

We thank our Customers for the patronage so kindly bestowed upon us, and beg to remind them they will find us ever ready to place the resources of our office at their disposal.

BOWERS BROTHERS, Printers
89, Blackfriars Road, and
Canterbury Road, Brixton, S.E.

Important Features.

NEWEST SHADES IN INKS.
NOVELTIES IN PAPER.
LONG EXPERIENCE.
ORIGINAL IDEAS.
LATEST DESIGNS.
FAST PRESSES.
CHEAPNESS.

Write for Estimates & Specimens.

Listen!

FINE SATISFACTORY. APPROPRIATE. ATTRACTIVE. ARTISTIC. QUAINT. PLAIN. ODD. PRINTING

WHAT APPEALS MORE PERSUASIVELY?

Bowers Brothers, Blackfriars, London, S.E.

IMPORTANT TO CHEMISTS.

BEFORE ORDERING ALMANAC

SEND FOR SAMPLE OF JOHN DAVIS'S **Domestic Year-Book** for 1893.

It is the Best
The Largest
The Cheapest

AT THE PRICE. COMPARISON WILL PROVE THE ASSERTION.

Unprecedented Testimonials as to its value from those who have adopted same.

Publishing Office—201 OLD KENT ROAD, LONDON, S.E.

HIGH CLASS. **DAVIS'S** LOW PRICE.

DOMESTIC YEAR BOOK.

NOW READY.

1893.] **ILLUSTRATED.**

In handsome wrapper, contains 32 Pages, 6 pages of which are for own Specialities, useful Tables, Calendar, Postal Information, and other matter specially compiled for Chemists' distribution. Best value in the market.

Eighth year of issue.

WRITE for SAMPLES to 201 OLD KENT RD., S.E.

FORD, SHAPLAND & CO.

CHEMISTS' AND GENERAL PRINTERS, LITHOGRAPHERS, ENGRAVERS, ETC.

6 Great Turnstile, HIGH HOLBORN, LONDON, W.C.

DON'T ORDER **ALMANACKS** FOR **1893**

UNTIL YOU HAVE SEEN OUR SAMPLES, as we have produced **TWO VERY CHOICE DESIGNS** for the Cover of our **POCKET ALMANACK AND CARD CALENDAR.**

Also BOOK ALMANACK and PURSE ALMANACK and CARD CALENDARS. Write for Specimens and Prices.

Price Lists, Pamphlets, Circulars, Billheads, Memorandums, Cards, and all kinds of Printing and Stationery required by Chemists, at most Moderate Prices.

AGENTS FOR REGISTRATION OF TRADE MARKS.

1893 1893

SILVERLOCK'S CHEMISTS'

ALMANACKS

SACHET ALMANACK, printed 32 pages
PRESENTATION „ „ 32 „
THE COURT „ „ 36 „
THE NEW „ 7×4¾ „ 36 „
Covers printed in 5 Colours.
HANGING CALENDAR, in Colours.
HANGING CARD CALENDAR, in 2 Colours.
SINGLE CARD CALENDARS.
FOLDING CARD CALENDARS.
PURSE ALMANACKS.

12 Designs to select from.

Specimens and Prices Now Ready.

Sent Post free on receipt of Business Card.

1893 1893

H. SILVERLOCK,

92, BLACKFRIARS ROAD, LONDON, S.E.

£5 PRIZE

The sum of FIVE POUNDS will be paid to the agent who sells the greatest amount of Dr. ALLINSON'S NATURAL FOOD, by retail, to the public between the 1st day of August and the 25th day of December, 1892.

DECLARATION FORM SENT POST FREE ON APPLICATION.

NATURAL FOOD CO. (PETER TYRER PROPRIETOR),

8 & 10 SOUTHALL PLACE, BERMONDSEY, LONDON, S.E.

Cash Price—20s. for 12½ Gallons.

CASKS FREE.

School of Cookery, Crystal Palace, S.E.

January, 1883.

Mr. Peter Tyrer,

Sir,—I have been using the "Borough" Ketchup, and am very pleased with it. Its flavour is excellent, both for all kinds of Savoury dishes and Soups; and I most certainly should advise every cook and housekeeper to use it, FOR I HAVE NEVER YET MET ITS EQUAL.

[2] MARIAN SMITHARD,

Lecturess on Cookery.

IT IS A FACT THAT THOSE WHO BUY FOR CASH

DO NOT THROW MONEY AWAY

BUT WRITE FOR A FREE SAMPLE OF

Tyrer's "BOROUGH" Ketchup

SILVER MEDAL LONDON.

SENT FREE TO ANY ADDRESS

MANUFACTORY—70 Long Lane, Borough, LONDON, S.E. CHIEF SCOTCH AGENCY—West Nile St., GLASGOW.

PETER TYRER'S SAUCES

WORCESTER, READING, HARVIE, YORKSHIRE, AND "BOROUGH" KETCHUP,

SILVER MEDAL.

	Per gross.	Extra Quality.
1d. Sample Bottles, dozen parcels	5/3	6/3
" " ½-gross boxes	5/9	6/9
1d. Giant " dozen parcels	6/6	8/6
" " ½-gross boxes	7/-	9/-

	Per gross.	Extra Quality
½ Bottles, flat or round, reputed ½ pints	16/-	26/-
½ " " " pints	26/-	38/-
1 Pint Imperial, round stoppered bottles	52/-	62/-
12½-Gallon Casks (*casks free*) each	20/-	32/-

ROYAL CAFE SAUCE, a Rich Fruity & Exquisite Flavour.

Square Glass Stoppered Bottles, containing nearly ½ pint Imperial, 42/- per gross. Sample Bottles at 7/- per Gross

EXCHANGE COLUMN.

FOR DISPOSAL.

Proprietary Articles.

Rackham's dog balls, 1 10s. tonic alt. con., 2 20s. ditto, 2 20s. purging balls. 3 20s. jaundice balls (soiled wrappers), 5 20s. boxes various (wrappers off). Holden & Kendall, York.

Miscellaneous.

Typewriter (Caligraph No. 2) for sale; cheap. Bones, Coventry.

500 battery-jars, 500 quarter plate glass developing-dishes at one-third cost. Harrop, Middleton, Lancs.

Cask of citric acid (1 cwt.) for sale: what offers? Two mirrors concave and convex, 22 inch × 18 inch, 35s. pair, new. Lund, Chemist, Bradford.

Six 2s., 8 1s. Silver's oil: 6 2s., 4 1s. 15 8½ pills; 3½ oz. ol. lavand. Mitch. cut. 1889; free to London; offers wanted. Eastman, Tottenham.

Maw's tincture-press, fig. 20, ½ gallon: also "Enterprise" tincture-press. Armitage's "Cattle Doctor"; what offers? or exchange Green, Lavenham.

Chamomile plants, flower twice annually, easily cultivated; chemists who have plot of land should go in for these: well repay outlay; 250 for 12s. 6d., smaller quantity in proportion; parcels post; note address. Jones, Penrhiw, Bryngwrau, Anglesea.

Dental

Tooth-forceps, set, 2 upper molars, right and left, Clendon's; lower, Maw, fig. 105; upper and lower stumps: 8 others, including gum-lancet, tenaculum elevator, &c.; offers. "Dens," 344 Caledonian Road, N.

Drugs and Chemicals.

Ol. Eucalypt. Glob., a parcel of 22 lbs.; what offers; sample forwarded. Kelly, 4 Ferme Park Road, Stroud Green, Finsbury Park.

Surplus goods, ½ lb. ol. cinnamon. ver., 2s. 6d. oz.; 20 oz. quinine, 9d. oz.; 4 lbs. opium Turc. opt., 7s. 6d. lb.; 2 doz. Stern's Pumiline Essence, 9s. doz; 50 lbs good galls, 5d. lb. J. C. Lingdale, Skelton, R.S.O.

Educational.

Attfield's "Chemistry," Wills' "Notes on Flowers," &c., 7l. 7s. Materia Medica cabinet: offers. 41 King's Road, Doncaster.

Offers invited. Human osteology—skull, spine, ribs, arm, leg, hand, foot, pelvis. Wanted, photographic hand-camera or Micrographic Dictionary. Henry Ebbage, Southend.

Attfield's "Chemistry" 5s. 6d.; Bentley's "Botany," 2s. 6d.; Squire's "Companion," 2s. 6d.; "Extra Pharmacopœia," 2s. 6d. Enrique Gracia, 177 Henderson Street, Glasgow.

Materia Medica cabinet, new, 20s.: microscope, 8s. 6d.; Wills' "Preliminary Exercises," 1s. 6d; "Latin Principia," Smith's, 1s., or exchange. W. G. B. 25 Lower William Street, St. John's Wood, N.W.

Attfield's "Chemistry," 1889: "British Pharmacopœia," with Addenda, 1885; Squire's "Companion," 1886; Squire's "Pharmacopœia London Hospitals," 1885: Martindale's "Extra Pharmacopœia," 1885. Collier, Gamlingay.

Formulæ.

Recipe for Cod-liver Oil Emulsion, perfectly white thick cream, guaranteed permanent, flows freely 2s. 6d.: also Solution of Cod-liver Oil in Ext. Malt. perfection, 10s Smith, 29 South Street, Liverpool.

Reliable recipes recommended with confidence: Catarrh pungent, glycerine cream, chilblain remedy, toothache cure, tic specific, occasional mixture (for ladies), corn cure, bronchitis mixture, skin pills, poppies and chamomiles (for fomentation), anti-drink pills, influenza mixture, new cough syrup sine scheduled poisons; recipes 1s. 1d., each, 3 for 2s. 6d.; detailed list and particulars of any post free. Tom Brooks, Chemist, Hornsey, London, N.

Shop Fittings.

Counter-scales (fig. 2, Maw), mahogany slab, agate, recently renovated and stamped, 20s. Elliott, Chemist, Southport.

Two 4-gallon, Maw's fig. 2, swan-neck carboys, cut stoppers, good as new: what offers? or would exchange for 2 2-gallon same kind. J. Hicks, Cross, Worcester.

Second-hand mahogany counters, plate-glass cases in front, 6 ft. 5l., 9 ft. 8l., 12 ft. 10l. Natali, 40 Gray's Inn Road, London, W.C.

Second-hand wall-cases, 4 ft. 65s., 6 ft. 95s., 8 ft. 130s., and 10 ft.; also several smaller sizes. Natali, 40 Gray's Inn Road, London, W.C.

Second-hand mahogany dispensing-screen, glass tablets and plate-glass doors, 4 ft. 70s., 5 ft. 85s., 6 ft. 5l. Natali, 40 Gray's Inn Road, London, W.C.

Second-hand counter-cases, 4 ft. 60s., 6 ft. 75s., 6 ft. 90s., 7 ft. 110s., 8 ft. 120s., 10 ft. 170s. Natali, 40 Gray's Inn Road, London, W.C.

Job lines in pear-shape carboys, 2 gall. 5s., 3 gall. 7s. 6d., 6 gall. 15s., 8 gall. 22s.; also a quantity of shop-rounds, syrups, mortars, ointment-jars, glass shelving, and various useful utensils; clearing out; half-price. Natali 40 Gray's Inn Road, Holborn, London, W.C.

WANTED.

Good medicine-chest, from 10s. to 35s. Cave, Chemist Southport.

Two pounds or dried dark pansy petals. Sample and price to W., 65 New North Road, N.

1s. 1½d. Moonseed ointment. Lees, Chemist, Oldham.

Second-hand air-pump, in good condition; state price and full particulars. Wokes, Pharmacist Grassendale, Liverpool.

The Chemist and Druggist for October 1 and 8, 1892; 6d. offered for the two. Publisher of The Chemist and Druggist, 42 Cannon Street, London, E.C.

Attfield's "Chemistry," Beotham's "British Flora," Southall's "Materia Medica"; must be last editions, and cheap. Boots, Coventry.

INDEX TO ADVERTISEMENTS

See pages 19 to 21.

EWALD HILDEBRAND,
ARMY CONTRACTOR.

No. 680, 12s. per dozen, guaranteed.
HALLE a/S, GERMANY.

THE SURGEONS' LINT,
V.B. QUALITY.
The superior quality of Newsome's Absorbent Surgeons' Lint is universally admitted. The V.B. quality is quite pure and of great superficial area and exquisite softness. The C., D., E., and F. qualities are equally pure and absorbent; E. is stronger in fabric.
NEWSOME' BLEACHED ROLLED BANDAGES, 3 in., 2½ in., 2 in. Also SURGICAL ABSORBENT OPEN BANDAGES.
Specially Bleached & Grey Carded Cotton Wools, Absorbent & Bleached & Grey Waddings; also Sheet Waddings, Tow, &c.
THE TRADE SUPPLIED THROUGH THE LONDON AND PROVINCIAL WHOLESALE HOUSES, OR FROM
C. NEWSOME, MANUFACTURER, BEEHIVE MILLS, ANCOATS, MANCHESTER.
London Agents—B. PRATT & CO., 1 Wood Street, E.C. Telegraphic Address—"Newsome, Ancoats, Manchester."

PETROLEUM JELLY
WHITE, RED AND YELLOW
BEST AND PUREST
TRADE MARK
S L
CONFORMS TO ALL REQUIREMENTS OF B.P.
CHEAPER AND EQUAL TO VASELINE, AND PRONOUNCED BY THE MEDICAL PROFESSION TO BE UNSURPASSED.
Tins of all sizes, from 1 to 10 lbs.; Iron or Wood Kegs, ¼, ½, and 1 cwt.; Barrels about 3 cwt., &c. Samples and prices on application, stating packages and quantities required, to the Manufacturers—
SNOWDON, SONS & CO., MILLWALL, LONDON, E.

TRIED AND PROVED TWENTY-SIX YEARS!

REGISTERED LUNG PROTECTOR TRADE MARK

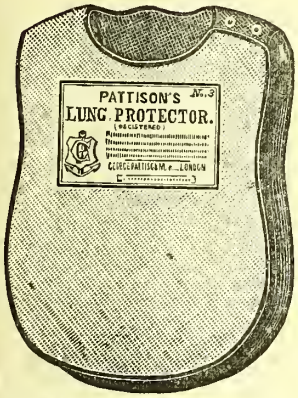
PATTISON'S

LUNG PROTECTOR

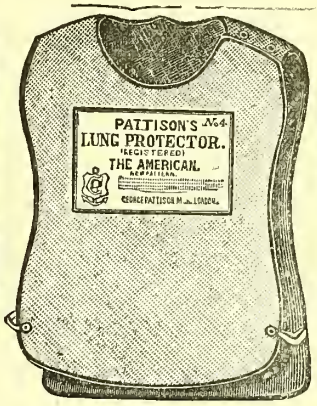
(REGISTERED).

THE ARTICLE THAT CREATED AND ESTABLISHED THE TRADE.

Continues to be made in the same Extra Superfine Quality of Material, in Scarlet, White, and Natural Undyed Wool. Chemists are **Cautioned** against inferior imitations.

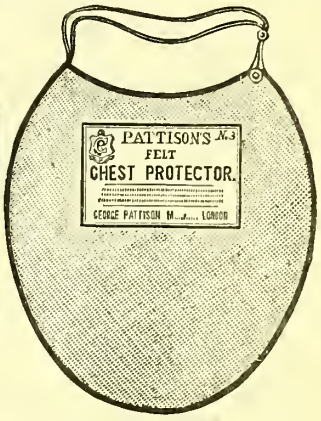


The Lung Protector.
ORIGINAL PATTERN.



Lung Protector.
THE AMERICAN.

Lung Protector.
THE CANADIAN.



Chest Protector.

PRICES:

	No. 00	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	
Original Pattern, Nine sizes...	10/-	14/-	18/-	26/-	34/-	42/-	52/-	60/-	70/-	per doz.
The American, Seven sizes ...	—	—	20/-	28/-	36/-	44/-	54/-	62/-	72/-	,,
The Canadian, Seven sizes ...	—	—	22/-	30/-	40/-	50/-	60/-	70/-	80/-	,,

FELT CHEST PROTECTORS.

	No. 00	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	
Nine sizes	4/-	6/-	8/-	10/-	12/-	16/-	20/-	24/-	28/-	per doz.

All in Scarlet and White, and made in same Wool as the "Lung Protector."

FELT CHEST PROTECTORS, C QUALITY { Single .. No. 1, 7/-; 2, 9/-; 3, 11/-; 4, 14/-; 5, 18/- per dozen. Double.. No. 1, 16/-; 2, 22/-; 3, 28/-; 4, 34/-; 5, 44/- per dozen. }

These are warranted equal to BEST of other makers, but are NOT recommended.

Terms: All Wholesale Houses either allow a large Discount for Cash, or quote the goods at Reduced Net Cash prices.

GEORGE PATTISON,

INVENTOR AND MANUFACTURER,

197 ST. JOHN STREET ROAD, LONDON, E.C.

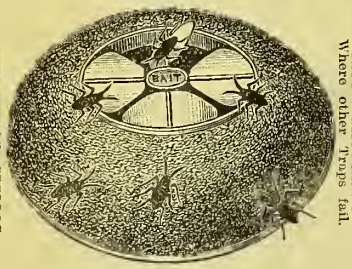
PERFECTION of MATCHES.

"STEAMER" SAFETIES.
"OLD TOM" SAFETIES.
"MONKEY" SAFETIES.
"ELECTRIC" SAFETIES.
"SQUIRREL" SAFETIES.
"MIDGET" SAFETIES.
LARGE FLAT SAFETIES.
"JUMBO" PARAFFINS.
"WHALE" PARAFFINS.
"DRAGON" PARAFFINS.

Also TANDSTICKORS, Finest Quality, and 30 other Brands in Stock.

"DEMON" BEETLE TRAP.

Patent No. 2312. SUCCESS GUARANTEED.



CATCH THOUSANDS Where other Traps fail.

Messrs. ROGERS BROS., Ironmongers, Watford, write:—

"Dear Sirs,—One of our customers informs us that six of your 'Demon' Traps caught 2,680 Beetles in five nights. They are the best Traps we sell."

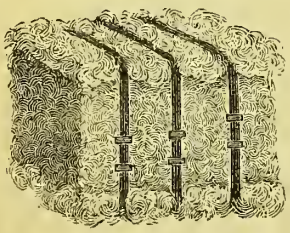
Is always ready for use, and will deceive and catch the sharpest beetle

NEW DISPLAY BOWLS.

	9	10½	12	13 inch.
Plain colours	7/6	9/	12/	15/ per doz.
Handsomely decorated	9/	11/3	15/	18/ per doz.

All the above can be had in any of the following colours:—Black, Blue, Red, Green, Oak and White, either Plain or Decorated.

WOOD WOOL,



OR WOOD-FIBRE PACKING.

This is used extensively for packing purposes in place of straw, &c. We use it largely, and can recommend it. In bales of 1 cwt., 7/- per cwt.

TELESCOPE LADDERS.

(KELLY'S PATENT)

These Ladders are superior to any other kind, having advantages too numerous to enumerate here, send for Illustrated List.

No.	Open.	Closed.	No. of Rounds.	Nett, Each.
00	7 ft. 6 in.	4 ft. 6 in.	9	11/3
0	9 ft. 9 in.	6 ft.	12	15/3
1	11 ft. 3 in.	6 ft 9 in.	14	19/3
2	17 ft. 3 in.	9 ft. 9 in.	22	24/9
3	21 ft.	12 ft.	27	3?/
4	24 ft.	13 ft. 6 in.	31	36/9
5	27 ft.	15 ft.	35	43/3
6	30 ft. 9 in.	17 ft. 3 in.	40	52/

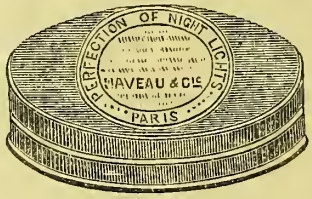
W. B. FORDHAM & SONS, Limited, 36 to 40 YORK ROAD, KING'S CROSS.

Brooke's Soap

MONKEY BRAND

In cases of 100 4d. bars	.. per case	25/
" 60 "	.. "	15/
In boxes of 48 2d bars	.. per box	6/3

FRENCH FLOATS.



NAVEAU'S BEST FRENCH MAKE.

6d. Boxes	per doz.	2/
1s. "	"	4/

W. B. FORDHAM & SONS, Limited, 36 to 40 YORK ROAD, KING'S CROSS.

BEESWAX

A GREAT VARIETY,

From 8d. to 1/6 per lb.

TOILET PAPER.

TOILET PAPERS.

12-oz. ROLLS PERFORATED.

No. 1 Toin Manilla, Per doz.		6/
" 2 Superior	"	4/6
" 3 Seconds	"	3/6

SPECIAL.

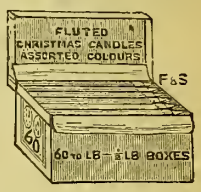
200 Cases Perforated 12-oz. Rolls 28/ per Case of 100 Rolls, or 3/ per doz.

12-oz. ROLLS NON-PERFORATED.

No. 1 Extra Super.....	4/9
" 2 Seconds.....	3/3

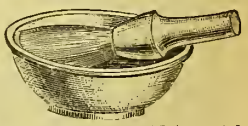
☞ *Write for our Special List of Papers.*

CHRISTMAS CANDLES.



Super Quality, fluted, assorted colours, 60 and 80 to lb., ½-lb. boxes, per doz. lbs. 7/6.
A reduction of original case of 56 lbs.

SHAVING BOWLS AND BRUSHES.



Nickel plated on B.M. to match. Per dozen sets 8/.

THE "INTELLIGENT" OIL CAN.

An Oil Can that knows when the lamp or stove is full, and intelligently STOPS. This Can is absolutely safe for a child or a blind person to fill a lamp with in the dark. It not only stops itself, but it continuously sounds an alarm until the lamp is full.

Half-gallon size, per doz.		9/
One " "	"	11/

The Chemist and Druggist

SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, OCT. 29, 1892.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

PLEASE NOTE.

ADVERTISEMENTS for this Supplement must be received at the Office, 42 Cannon Street, E.C., not later than **5 o'clock on Thursday Evenings,** for insertion in the current week's issue.

Advertisements must be prepaid. Remittances by post may be made in stamps, or by postal order made payable to "EDWARD HALSE," and crossed MARTIN'S BANK (LIMITED). To ensure prompt attention address all communications endorsed "Supplement," to The PUBLISHER of "THE CHEMIST AND DRUGGIST."

OFFICES: 42 CANNON STREET, LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—**LONDON** (within a few miles of). – Good-class Dispensing Business; well established; returns £1,125, *with first-class profits*; no cutting; good house and garden; well-fitted and convenient shop; price £1,000.

2.—**LONDON, S.W.**—Thickly populated locality; good ready-money Business; Retail and Dispensing; returns £1,100 yearly, *with good profits*; shop well fitted and good stock; valuation terms can be arranged.

3.—**LONDON, Near.**—Good business town; old-established family Business; returns over £1,125 last year; *net profits* £400; well-fitted shop and good stock; about £950 required; worth attention.

4.—**SURREY** (Good Town).—Dispensing and Retail Business; well situated; returns £600 yearly; all good prices; well-fitted shop and good working stock; good house, garden, &c.; about £500 required.

5.—**NORTH OF ENGLAND.**—Light Retail and Dispensing Business (unopposed); held by vendor 7 years; returns £500 yearly, *with good profits*; well fitted shop and good stock.

6.—**KENT** (Good Town). — Business established; held by vendor 8 years; returns about £800 yearly; well fitted shop, comfortable house; terms small; premium and valuation.

7.—**BUCKS.**—Old-established Mixed Business; large scope for increase; returns at present about £1,250 yearly; large shop and good warehouse room; very good house, situate in the centre of the town; small premium and valuation.

8.—**CATHEDRAL TOWN** (South of England).—Very old-established Retail and Dispensing Business; held by vendor over 30 years; returns nearly £400 yearly, *with good profits*; convenient house and good stock; easy terms can be arranged.

9.—**DEVON.**—Good agricultural Country Business; returns over £1,300 yearly, with nearly £400 *net profits*; well fitted double-fronted shop and good stock; large house, garden, &c.; about £1,000 required.

10.—**NEAR LONDON.**—An opportunity offers for the transfer of a very old-established Business; returns nearly £1,300 yearly, *with over £400 net profits*; well-fitted shop and good stock; vendor will give twelve months' partnership introduction; references given and required; price for the whole about £1,200.

11.—**SOUTHERN COUNTY.**—Fashionable residential neighbourhood; good-class Family Business; returns about £400 yearly, *with profits above the average*; convenient house; small garden; about £400 required.

12.—**LANCASHIRE.**—Retail and good-class Family Prescribing Business; returns about £400 yearly; well-fitted shop and good stock; convenient house attached; about £400 required.

13.—**SUSSEX.**—Good business town; Retail and Dispensing Business; held by vendor 8 years; returns nearly £800 yearly; good house attached; vendor being anxious for an early sale will accept small premium and valuation.

14.—**BIRMINGHAM**—Prescribing and Retail Business; held by vendor many years; returns £550; well-fitted shop and good stock; large house with every convenience; about £450 required.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country. Particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London Agent.

NOTICE.—*Messrs. ORRIDGE & CO. have a large number of Businesses for Sale, suitable for Gentlemen with Small Capital. Full particulars on application.*

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

F. J. BRETT,

VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE. NO CHARGE TO BUYERS.

STOCKTAKING UNNECESSARY.—Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

F. J. BRETT is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

STOCKS AND FIXTURES BOUGHT FOR CASH.

YORKS.—Returns £700; good-class Retail in pleasant town; valuation about £600, part can remain.

SHROPSHIRE.—Unopposed Retail, Dispensing, and Prescribing; Returns £630, net profit over £250; valuation about £450.

LONDON, W.—Returns £500; nearly all Dispensing; price £320.

YORKS.—£1,000 returns; General Light Retail in manufacturing district; rent nearly covered by agency; valuation about £500.

SUSSEX.—Dispensing and Light Retail; returns £530; rent £30; price £420.

SURREY.—£600 returns; Light Retail, Dispensing, and own Proprietaries; good house, garden, greenhouse, &c.; price £400 or valuation.

MESSRS. BERDOE & CO.

CHEMISTS' TRANSFER AGENTS & VALUERS,

30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

VALUATIONS and TRANSFERS conducted in any part of the United Kingdom. Over 20 years' practical experience.

NO CHARGE TO PURCHASERS.

1.—**KENT (Coast).**—Retail, Dispensing, and Prescribing Business; returns £600 under indifferent management; good house; same hands 20 years; retiring; price £400, or offer.

2.—**YORKSHIRE.**—Very old-established Business; returns £800; good house and garden, very handsome shop; business capable of increase; selling through illness; price £650, or valuation.

3.—**SOMERSET.**—Very old-established Retail, Dispensing, and Prescribing Business; returns £1,400; held by vendor 36 years; now retiring; price £1,000 or valuation; would suit Dissenter.

4.—**DERBYSHIRE.**—Retail and Prescribing Business, with several good proprietaries; returns over £600; net profit £200; rent only £20; well fitted and stocked; good house; price £300.

5.—**SOMERSET.**—Unopposed Village Business; pretty locality; returns £500; capable of increase; rent £28; good house; large garden; good opening for Dentistry; price £400.

6.—**DEVON.**—Retail, Dispensing, and Prescribing Business; returns over £400, with scope for considerable increase; low rent; good house; must be sold through illness; price £330, or offer.

7.—**KENT (Coast).**—High-class Dispensing Business; finest position in fashionable town, and where there are exceptionally good advantages for increasing the trade; valuation, about £1,000.

8.—**READING.**—Branch Retail and Prescribing Business; quite unopposed; now under management, and making a net profit of £140 after paying expenses; only valuation required.

9.—**LONDON (within 10 miles).**—Retail, Dispensing, and Prescribing Business; returns £1,150; net profit £450; good house; garden; shop well fitted and stocked; price £1,000.

10.—**LONDON, W.**—Market thoroughfare; Retail and Prescribing Business; returns over £8 weekly under management; rent £50, let off £25; good house; price £250, or valuation.

Having a large number of Businesses on our Register it is impossible to advertise all. Purchasers may obtain information regarding others, either by personal application or by letter, stating requirements.

Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, E.C.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

FOR sale, old-established Business, in good thoroughfare; great sacrifice to immediate purchaser; price £125. W. Bates, 50 Oxford Street, Southampton.

TO be Sold, in a country town, a House and Shop, with fixtures and stock; Chemists' Business carried on on the premises for 50 years. Apply, Percival G. Saunders, Solicitor, Chipping Norton.

POPULAR Watering-place, North Wales.—A small Business hitherto conducted as a Branch, relinquishing on account of ill-health. Apply to S. W., c/o Messrs. Evans, Sons & Co., Hanover Street, Liverpool.

TO be disposed of, a genuine Dispensing Business, with Light Retail, at full prices; in town; price £1,000; particulars to a *bonâ fide* purchaser; no agents. Apply to "Chemicus," care of Messrs Hill & Son, 101 Southwark Street, S.E.

70

Messrs. CROCKER & CO.

Trade Valuers, Transfer Agents, and Accountants,

15 WALBROOK, E.C.,

Have at the present time a large number of inquiries for good-class Country Businesses, and they invite communications from intending vendors. **NO CHARGE IS MADE UNLESS A SALE IS EFFECTED**, and particulars of businesses are given to those only having the required amount of capital to invest, thus guaranteeing only *bonâ-fide* inquiries and obviating publicity. **VALUATIONS MADE FOR PROBATE OR TRANSFER, BOOKS AUDITED AND BALANCE-SHEETS PREPARED IN ANY PART OF THE UNITED KINGDOM.** Having had many years' practical experience in the Wholesale and Retail Drug Trade, C. & Co. can offer valuable assistance and advice in the conduct of such matters. References permitted to past and present Clients, also to the Leading Wholesale Houses in the Trade.

SURREY (in good residential locality near the Banks of the Thames).—A first-class Dispensing Business; returns approach £1,200; price to an immediate purchaser £1,000; an exceptionally sound investment.

NORTH LONDON.—Family and Dispensing, with a few valuable Proprietaries which are stocked by the trade; returns £700 under neglected supervision; formerly, when properly attended to, they were £1,300; price £650; the stock and fixtures are alone worth more.

OXFORDSHIRE.—Retail, Prescribing, Dispensing, and Agricultural trade; returns about £2,000; price £800; valuable Agency attached.

LONDON, N.W.—Light Retail and Dispensing; has been in present hands 25 years; returns £900; price £700; this is specially recommended.

LINCOLNSHIRE.—Retail and Agricultural Business, established many years; returns £1,400; good house, with private entrance; price £500; worth attention.

SURREY.—Unopposed good-class Retail and Dispensing, with good stock; returns over £700; price £550; an exceptionally good investment.

LONDON, S.E. (main road, exceptionally good investment)—Ready-money Retail and Prescribing; returns £600; price £250.

LONDON, W.—Old-established business; well-fitted pharmacy and good stock; returns under a manager £400; price £350, or valuation.

MANAGER wanted for a good London Business.

APPRENTICE wanted by a Major man in good Country Business.

NO CHARGE TO PURCHASERS.

VALUATIONS A SPECIALITY. TERMS ON APPLICATION.

BUSINESSES FOR DISPOSAL—Continued.

FOR immediate disposal, an old-established Business in good town in Yorkshire; satisfactory reasons for disposing; part purchase-money can remain on security. For full particulars apply, 190/41, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BIRKDALE, near Southport.—At valuation, genuine old-established cash Drug, Prescribing, and Drysaltery Business; well-fitted shop and store-rooms; splendid house; private entrance; ill-health cause of disposal. Address "South," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

NEAR London.—Opportunity occurs (through illness) of securing an old-established ready-money Retail, Dispensing, and Prescribing Business, making a net profit of £430 per annum; large house, excellent garden; price £950; references given and required. 49/83, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IMMEDIATELY.—Under exceptional circumstances; Retail, Dispensing, and Prescribing Business in good-class London suburb; handsome shop, well stocked and fitted; good house and garden; improving neighbourhood; must be sold at once; fullest investigation invited; price £200. "Suburb," 12 Foxberry Road, Brockley.

£450 or Valuation.—Retail, Dispensing, and Prescribing Business in a good-class locality, 10 miles from London; returns £600; good prices; several valuable proprietaries; good house; long garden; having purchased larger business West of England, immediate possession given. 49/84, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

GENUINE Retail Drug Business for sale; established 20 years ago by present proprietor, who is retiring from retail; long lease, as lock-up shop or with house; 10 minutes from London Bridge, Surrey side; thickly populated; very brisk ready-money drug trade, with two or three good proprietary lines. Address, "Practical Chemist," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

STAFFORD.—An exceptionally good opportunity offers for an energetic Chemist capable of Prescribing to secure an unopposed light Retail and Dispensing Business; established 20 years; rising neighbourhood of 5,000 inhabitants; an appointment worth £48 a year attached; low rent; full prices; part may remain. Full particulars from Opium, "Pharmaceutical Journal" Office, 5 Serle Street, W.C.

BUSINESSES FOR DISPOSAL—Continued.

BIRMINGHAM.—Thickly populated; a genuine Prescribing and Light Retail, returning £500 with only partial attention, and increasing; considerable Proprietaries; no patents; price £275. "Prescriber," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£150, to an immediate purchaser, will secure a nice-class Chemists' Retail and Dispensing Business; good house; long lease; low rent; let off; capable of great extension; stock and fixtures cost nearly double; doing, under management, about £300; perfectly genuine; northern suburb of London. Further particulars of "Otto," 8 Torwood Terrace, Torquay.

LONDON.—Main road, West-end; old-established Business; returns £500, nearly all Dispensing; price, to include beneficial lease, £325; immediate possession will be given; illness cause of sale. Apply, H. I. W., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

HANDSOME Pharmacy, returning about £750, increasing, in best position in large town, about one hour from London; rent £65; long lease; price about 1 year's returns; pushing man could greatly increase returns; town reference required. Address, "Aurantii," 44 Tollington Road, Holloway, N.

ON the banks of the Thames.—First-class Dispensing Business; many years in present hands; returns £1,150; price, to include valuable inventory, £1,000; satisfactory reasons for selling. Apply, "Oxon.," care of Messrs. Newbery & Son, 1 King Edward Street, E.C.

£200 Cash.—A Genuine old-established Retail and Prescribing Business, in leading thoroughfare of densely-populated neighbourhood, North London; handsomely-fitted shop; convenient house; long lease; private entrance, with good garden; returns average over £400; proof; capable of great increase; good opening for Dentistry. 199/5, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, a genuine Business, returning from £800 to £1,200; for cash. Full particulars, in confidence, to J. E. P., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a Light Retail, Dispensing, and Prescribing Business, with net profit of not less than £500; must bear strictest investigation; Yorkshire preferred. Apply, in confidence, to "Radix," 151 Goll Street, Sheffield.

WANTED, immediately, the nucleus of a promising, middle-class Business in or near London; or to act as Manager with a view to purchase. Full particulars, 201/8, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

THE Advertiser desires to apprentice his son to an old-established Chemist, and would be pleased to hear from any who have a vacancy. Apply, C. Garcia, 34 Carlton Road, Southampton.

TO Chemists and Dentists.—Wanted, to apprentice (indoors) a youth where he would learn the above businesses. Send full particulars to Hoskins, Mandeville Road, Enfield Wash.

APPRENTICE.—In first-class business in Tunbridge Wells; must have passed Preliminary or equivalent; premium required. Apply, "Major," 6 Park Road, Tunbridge Wells.

TO Parents and Guardians.—A vacancy occurs for an apprentice in a first-class old-established Retail and Dispensing Chemist's business. This is an exceptional opportunity for a well-educated youth, proprietor having had very extensive West-end and provincial experience; terms moderate. Apply to "Dispensing," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

PARTNER, with from £1,000 to £2,000 capital, to enter and extend a good going English Chemist's Business in the Argentine Republic, proprietors of several specifics (good sale), have been advertised, and could be made a very large business with extra capital, as the duties on foreign patent medicines are exceedingly heavy. Paul Casello, 86 Rosario, R.A.

FOR SALE.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

TO be sold immediately, the fixtures and fittings of four first-class Chemists' Shops; including several ranges of mahogany-fronted drawers, fitted with glass labels; six massive mahogany dispensing screens with embossed mirror in centre; ten mahogany bent glass counter cases, fitted with sliding trays and serving shelf above; six mahogany counters, fitted with drawers; also a large quantity of wall cases. To be sold at a vast sacrifice, wanting room. Edwards & Fotbergill, Old Haymarket, Liverpool.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

GOOD opening for Chemist and Druggist; rent, to commence, £40 per annum; situate Fulham Cross, W. Apply, Maxwell & Co., 17 Baron's Court Road, West Kensington.

LEEDS (Briggate).—To Let, in the very centre of this populous town, Stockrooms, from £1 per month; free from taxes. Further particulars, write Mosley, Rent Collector, 6 Wormald Row.

SHOP to Let, opposite "Archway" Tavern; good market position; 27 Highgate Hill; been Chemist's for many years; double plate-glass front; moderate rent. Apply, Dr. Richards, 38 Arundel Square, Barnsbury, N.

DEATH.—An old-established Chemist's Shop to Let; immediate possession; double fronted; fitted, and everything to carry on the business. For particulars, apply to E. M. Harrison, Swan Hotel, Biggleswade, Beds.

HOMERTON.—Factory premises to be Let or Sold; area about 1,820 square feet; 12 h.-p. nominal steam-generating boiler, set in brickwork; ventilating and chimney shafts; valuable plant, consisting of vats, tanks, &c.; suitable for manufacturing chemist or any business requiring ample space; rent £100 a year. For full particulars, apply to Ball, Norris & Hadley, Auctioneers and Surveyors, 5 Argyle Place, Regent Street, W.

SALE BY AUCTION.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

TOWN OF ST. CLEARS.

Sale of Important and valuable Dwelling-house, Shop, and Premises, and Goodwill of Chemist and General Wholesale and Retail Business, with Wine and Spirit Business attached.

MESSRS. JAMES DAVIES & CO. have received instructions to offer for SALE by PUBLIC AUCTION (unless previously disposed of by private contract), at the Swan Hotel, St. Clears, on Tuesday, November 1, 1892, at half-past 2 in the afternoon, all that very well and conveniently situate Freehold Messuage or Dwelling-house, with the Shop, Warehouse, Yard, and Outbuildings, situate in the Town of St. Clears, together with the Goodwill of the well-known Chemist and Wholesale and Retail Wine and Spirit, and Seed, Grocery, and General Business, recently carried on by the late Mr. Richard Williams, deceased, and previously by his uncle, the late Mr. Evan Williams, deceased.

There is attached to the business a Victualler's Double Licence, and a large and lucrative business until some time last year had for upwards of 50 years been carried on by the late Mr. Evan Williams; and the business was subsequently carried on by his two nephews, and latterly by Mr. Richard Williams to the time of his death.

The Stock-in-Trade must be taken at a valuation by the purchaser.

The above affords a splendid and rare opportunity to an enterprising young man to continue a large and thriving business in a most central and rich district.

For further particulars apply to Mr. John Davies, L & P. Bank, St. Clears; Mr. John Thomas, Talog; the Auctioneers, at Goitrefawr, Whitland; or to

Mr. W. MORGAN GRIFFITHS,
Solicitor, Carmarthen.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, Junior, of good experience. Apply, E. Lloyd, Chemist, Colwyn Bay.

WHOLESALE.—Wanted, an Assistant for Dry counter. Apply, Langton, Hicks Bros. & Co., 33 Wilson Street, Finsbury.

COMPETENT Assistant; indoors. State salary required, and enclose photo, to Arthur Carlton, Chemist and Druggist, Peterborough.

WANTED, a man, a Chemist, to take charge of a wholesale business, also one to manage a shop. Apply to G. Handyside, Newcastle.

WANTED, a qualified Junior Assistant, accustomed to high-class Retail and Dispensing. Apply (enclosing photo) to Mr. Lester, Cork.

WANTED, a qualified Assistant; outdoors; must be steady, single, and about 25. Apply, giving experience, salary, &c., Ferris & Co., Bristol.

AN Assistant, aged about 25, with a slight knowledge of bookkeeping; good handwriting essential. Apply, by letter, to Squire & Sons, 413 Oxford Street.

A QUALIFIED and experienced Assistant wanted. Apply by letter, stating all particulars, to H., The Poplars, Ashbrooke Road, Sunderland.

ASSISTANT (Junior), good Dispenser, for an extensive Dispensing establishment in Ireland. "Pharmacist," Hodgkinsons, Treacher & Clarke, 101 Whitecross Street, E.C.

AT once.—Junior, about 20, in light Country Retail, Dispensing, and Prescribing business; time for study; comfortable home. Cooper, Chemist, Brightlingsea.

QUALIFIED outdoor Assistant, chiefly for Counter work. Full particulars of age, height, experience, and references to Peacock & Co., 82 Stoke's Croft, Bristol.

SOUTH Coast.—Wanted, a Junior Assistant, outdoors; short hours. Apply, with full particulars, 199/25, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHEMIST'S Assistant wanted at once, a Welshman and abstainer, to manage a business; a comfortable home and a permanency to one who suits. A. E. Evans, M.R.P.S., Brynmawr.

IMMEDIATELY, Junior (indoors) in good-class Retail and Dispensing. Apply, with usual particulars and c.d.v. (which will be returned), to Mr. Dunston, 49 Borough, Farnham, Surrey.

INDOOR Assistant wanted, to manage Retail and Dispense for Surgeon. State age, experience, qualifications, and salary required, "Medicus," 113 High Street, Plumstead, London, S.E.

WANTED, the second week of December prox., qualified Assistant. Apply, stating age, height, salary required, previous experience, and enclose photograph, W. T. Cole & Sons, Weymouth.

JUNIOR Assistant; indoors; aged about 20; hours light. Apply, with full particulars as to age, experience, references, salary, W. E. Hill, late Tomlinson and Hayward, High Street, Lincoln.

ASSISTANT; competent; good Counterman and willing; as second in quick business; indoors; salary £40. Apply, with references, to "Alpha," c/o Barron, Harveys & Co., Gutspur Street, London.

AN Assistant, from 19 to 22 years, who can be well recommended; opportunity for study allowed; other assistants kept. Address, with every necessary particular, to Mr. Fred. T. Groom, Chemist, Birmingham.

WANTED, a qualified Assistant with good Dispensing experience; aged about 24, indoors. Send photo (to be returned) and usual particulars to B. Allen, 125 Hampton Road, Redland, Bristol.

DISPENSER required for medical man; hours from 10.30 to 1 mornings and 6.30 to 10 evenings. State particulars and terms to "Medicus," c/o Messrs. Langton, Hicks Bros. & Co., Wilson Street, Finsbury, E.C.

IMPROVER or Junior required in Light Retail and Dispensing business. Applicant to please state age, height, and full particulars, enclosing photo if convenient (which will be returned), H. L., 42 High Street, Ashford, Kent.

WANTED, a good Junior, aged about 22; will be required to dispense at local Cottage Hospital one hour daily. Personal application preferred; if by letter, state salary and full particulars to W. Ham, 176 High Street, Hounslow, W.

A SMART Improver or Junior, accustomed to a Mixed Country business. Apply, with full particulars, enclosing photo and stating salary required (indoors), to 191/12, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, immediately, a Dispenser and Bookkeeper in an East-end Practice; one seeking a permanency preferred. Apply, personally, between 12 and 1, at 86 High Street, Whitechapel.

JUNIOR, about 22, for first-class Dispensing business; must be fully competent and well recommended. Apply, with full particulars of experience, &c., and enclose photo, T. Buxton, Chemist, Clifton.

FOR Manila.—A young Assistant, accustomed to good Mixed Country business. Qualification not so much an object as ability and good all-round experience. Address, Messrs. John D. Humphreys & Son, 8 Fenchurch Buildings, E.C.

WANTED, qualified Assistant at once; one used to Store Trade preferred, £2 per week and commission given to a good man; age from 25 to 35. Apply, with usual particulars, to Thompson's, Cash Chemists, Ashton-under-Lyne.

WANTED, immediately, a Junior Assistant accustomed to a Country business; indoors; no Sunday duty; half-holiday weekly. Apply, with full particulars as to age, experience, and salary required, to T. Davies, Pharmacist, Porth, Glam.

AN Assistant, about 22; must be well up in Dispensing, and have good references. Write appointing interview, or send carte, with full particulars how long in last situation, and salary required, "Pharmacy," 2 Fernhead Road, St. Peter's Park, W.

A COMPETENT Senior Assistant, for a General Retail and Dispensing business; able to take charge when principal is absent; 2 kept; abstainer preferred. Address, stating age, experience, references, and salary required (indoors), "Quinine," Messrs. Evans, Sons & Co., Hanover Street, Liverpool.

COUNTER Assistants wanted, for Dublin Branch; applicants must be of good address, and sharp at their business. For interview in London, write, stating full details of experience, age, and salary (outdoors) required, to the Secretary, Junior Army and Navy Stores (Lim.), York House, Regent Street, S.W.

A PUSHING, energetic, gentlemanly, business-like Assistant required for a high class cash business in a fashionable provincial town, aged 25 to 30. Apply, stating when disengaged, height, references, salary, in or out doors, enclosing carte (to be returned), to X. A., Barclay's, 95 Farringdon Street, London.

QUALIFIED Manager (Irish degree), single, indoors, to take sole charge of country branch; must be well up in country trade. Apply by letter, stating age, height, experience, enclose photo and references (which must bear strictest inquiry), to Wheldon, Chemist, Rathkeale, Ireland.

AGENTS wanted.—Bruce & Co., manufacturers of prepared Soups, Extract of Beef, Essence of Beef, Desiccated Soup, Potted Beef, &c., &c., require first-class Representatives to cover every town in the United Kingdom. Bruce's productions are of the highest quality, and the prices are right to ensure large turnover. First-class people only negotiated with. Write Bruce & Co., Limited, Waltham Green, London, S.W.

SMART Improver or Junior for Mixed Country business; no heavies, little stationery, Gilsey; short hours, comfortable home; facilities to studious one; pleasant neighbourhood; gymnasium and boating. Apply, with full particulars, stating age, height, salary, and enclosing photo (returned), references, and experience, to W. Baxter, Pharmaceutical Chemist, Fordingbridge, Hants.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

ASSISTANT; 7 years' experience; 23. "Ipecac.," 87 Wilton Street, Devonport.

LOCUM TENENS or otherwise; disengaged. F. H. Slynn, Stafford House, Rhyl.

ASSISTANT (23); London experience; good references; short hours preferred. 9 Harleyford Road, Kennington.

MANAGER; qualified and registered; good references. G. P., 45 Halford Street, New Wortley, Leeds.

AS Assistant; outdoors; experienced; aged 25. W., 17 Ramsden Terrace, Leeds.

JUNIOR; aged 19; 3½ years' experience. W. T. B., 32 Courtenay Street, Swansea.

MANAGER; qualified; 27; good experience. A., 19 Nottingham Road, Mansfield.

JUNIOR (20); 4½ years' experience; good references. G., 15 Bates Street, Sheffield.

JUNIOR (20); 3½ years' experience, country, indoors. B. J., 19 Cornmarket, Thame.

SITUATIONS WANTED—Continued.

PART-TIME engagement; early, until December 1. Collins, 45 Wook Street, Maidstone.

ASSISTANT; full or part time; London. "Statim,' 66 Waterloo Road, Market Rasen.

QUALIFIED Assistant (23); town or country. "Minor," 63 Frampton Park Road, N.E.

LOCUM-TENENS; disengaged; aged 23; good Extractor. 2 Horton Street, Lewisham, S.E.

ASSISTANT (26); 8 years' experience; outdoors preferred. W., 16 Blossom Street, York.

LOCUM; aged 29; qualified; experienced; good references. Glover, Princes Street, Cheltenham.

JUNIOR; 6 years' experience; 23; abstainer; disengaged. "Statim," c/o Gibbs, Chemist, Eastbourne.

PART-TIME or Wholesale; qualified; London or Manchester. "Chemist," 467 Old Kent Road.

AS Senior or Manager; Minor; 25; first-class experience. "Chemist," 5 St. Mary's Square, Paddington.

EXPERIENCED Assistant in good-class business; aged 31; abstainer. E., 1 Bedford Place, Bournemouth.

DENTAL mechanic; temporary; town or country; aged 36. "Dental," 16 Argyle Square, W.C.

IMPROVER or Assistant; experience in Stores; disengaged. B., 40 Ilminster Garden, Lavender Hill.

PART-TIME (22); London; 6 years' experience. Barnes, c/o Mr. Frewin, 6 North Place, Maidenhead.

MANAGER; aged 40; married; no children; disengaged November. Davies, 11 Woodwell Crescent, Bristol.

ASSISTANT (23); tall; qualified; London preferred; disengaged. Chemist, 4 Cosmo Place, Russell Square.

ASSISTANT; well up in first-class Dispensing and Retail, Prescribing, Extracting. W., 136 Uxbridge Road, W.

ASSISTANT to Chemist or Dispenser to Surgeon; 23; 7 years' experience. "Dispenser,"49 Senrab Street, E.

JUNIOR; qualified; aged 23; 7 years' experience; good references. "Minor," 3 West Kensington Terrace, W.

AS Manager; experienced; good Prescriber and Counterman; qualified; in or out door. "Barium," 93 Bury New Road, Bolton.

MANAGER; qualified; permanency desired; disengaged. "Nux," Sunny Bank, Lethbridge Road, Southport.

PART or Whole Time; aged 25; good Dispenser; London preferred. "Chloralumid," 11 Omega Place, St. John's Wood.

ASSISTANT (23); in London; outdoors; 7 years' experience. "Alpha," 13 Tichborne Street, Edgware Road, W.

AS Assistant in good Country business; aged 30; unqualified; good experience; Prescribing, &c. L., 59 York Road, S.E.

DISPENSER-BOOKKEEPER.—Permanent or Locum, after November 3. "M." 86 Dynevor Road, Stoke Newington.

IMPROVER in Wholesale; 2½ years' experience; aged 21; height 5 ft. 10 in. Norton, 4 Trafalgar Road, Egremont, Cheshire.

DISPENSER; thoroughly experienced; Minor man; first-class testimonials. Terms, &c., outdoors, Iris, 23 Carter Street, S.E.

MANAGER or otherwise; good varied experience; Extractor; disengaged; 32 years. "Statim," Banbury Villa, Putney, S.W.

MANAGER (Branch), Locum-Tenens, or one or two days weekly; registered; reliable. "Sigma," 144 Graham Road, Dalston.

TO Widows and Trustees.—A fully experienced Manager, middle-aged, registered, offers his services. G. Ramsden, Newport, Salop.

AT once; as Assistant; aged 36; unqualified; indoors; permanency preferred; good reference; single. Lumbus, Aston, Nantwich.

AS Branch Manager or Assistant; qualified; married; aged 48; can Extract Teeth; 5 ft. 9 in. "Chemist," 332 Harrow Road, London, W.

AS Assistant; 6 years' experience; height 5 ft. 11 in.; aged 21 years; highest references. Henry Bell, 44 Cumberland Street, Edinburgh.

DENTAL and Pharmacy.—Advertiser requires permanency in above. "Dentist," 316 Wandsworth Road.

AS Junior: aged 20; height 5 ft 8 in.; 4 years' first-class experience; indoors; Yorkshire preferred. F. R. Woodhouse, Kirkby Lonsdale.

AS Locum or Manager, by the day, week, or month; disengaged; qualified; reference. B. C., 56 Adolphus Street, Deptford, London.

LABORATORY; aged 29; good experience and references; Minor. Apply, "Lab.," 49 Westwick Gardens, West Kensington Park, London.

BRANCH Manager or Assistant; 20 years' varied experience; single; abstainer; unqualified. "Hydrarg.," 37 Market Place, Devizes.

AS Junior (20); in first-class business; 5 years' experience; good reference. C. B., c/o Messrs. Evans, Lescher & Webb, 60 Bartholomew Close, E.C.

IMPROVER in good-class London business; salary of little import; aged 17: 3 years' experience. W. W., 130 Charing Cross Road, W.C., c/o W. Thorley.

JUNIOR, in good-class business; aged 19; good Counter and Dispensing experience; excellent references. Leigh, 3 Parade, Hanwell, W.

JUNIOR, in good-class business; 23; outdoors; tall; North preferred; moderate hours; good reference. Chas. Hicks, Meltonby, Pocklington.

ASSISTANT (24); unqualified; Wholesale preferred; 8½ years' experience (Mixed); good reference. H. D., 79 Carlisle Street, Edgware Road, N.W.

MANAGER or Locum-Tenens.—Thos. Tomlinson & Co., Wholesale Druggists, Cannon Street, Manchester, can confidently recommend a gentleman.

MANAGER or Senior; 17 years' first-class experience; highest references; correspondence invited; disengaged. "Lupuline," 42 Cannon Street, E.C.

WANTED, by a young man of good experience, a situation, preferably as Dispenser, which will occupy a short time daily. "Constans," 11 Lyndhurst Road, Peckham.

ASSISTANT or Dispenser; aged 29; tall, gentlemanly, and energetic; unqualified; highest references. "Chemicus," School House, Fittleton, Marlborough, Wilts.

ASSISTANT or Dispenser; aged 26; height 5 ft. 9 in.; City and West-end experience, outdoors preferred; unqualified. "Cymro," 43 Third Avenue, Queen's Park, W.

BRANCH Manager or Assistant; permanency; aged 28; married; 12 years' varied experience; Extractor; excellent references. "Manager,' 32 Powis Street, Woolwich.

ASSISTANT; good references; Dispenser, Prescriber, Extractor; married; aged 31; 15 years' experience; Lancashire preferred. "Chemicus," 461 Rochdale Road, Manchester.

ADVERTISER, qualified, desires engagement in small business, view to immediate or eventual succession; Lancs. preferred. Jones, 19 Broad Street, Blaenavon, Monmouthshire.

MANAGER: near London preferred; qualified; married; experienced Dispenser, Prescriber, Extractor; excellent references; disengaged. B. B., 45 College Street, Salisbury.

MINOR (23) requires permanent situation in a first-class business in City or suburbs; good Dispenser; offers not answered in two days declined. R. P., 11 Dacres Road, Forest Hill.

LABORATORY.—Young Chemist seeks re-engagement; good pharmaceutical, chemical, analytical knowledge; excellent testimonials. "Reynolds," 38 Vaughton Street South, Birmingham.

AS Temporary Manager or Assistant; accustomed to good Mixed Retail; Prescriber; excellent references; disengaged. "Beta," Mr. E. W. A. Sayer, Walton S.O., Norfolk.

ASSISTANT: Wholesale or Retail; good Prescriber and Tooth-extractor; aged 28; Manchester or district. "Statim," 2 Upper Medlock Street, Manchester.

MANAGER or Assistant; temporary or permanent; aged 35; Minor; good Prescriber and Extractor; w... recommended. T. J. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LOCUM-TENENS and Temporary; country preferred; qualified; experienced; steady and reliable; highest references; terms moderate; disengaged. "Extractor," 23 Florence Road, London, S.E.

MANAGER or Assistant; outdoors; qualified; single; aged 40; 3 years' in present berth; salary 2 guineas; liberty November 5. "Progress," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS WANTED—Continued.

JUNIOR, disengaged, requires engagement; good-class trade preferred. "Minerals," 40 Russell Street, S.W.

AS Locum or Manager; extensive London experience, Stores and Retail; aged 40. A. B., 93 Gresham Street.

UNQUALIFIED; part-time or short hours; London or suburbs; 26; outdoors. "Competent," 25 Swinton Street, W.C.

EVENING duty after 7, Saturdays after 5; Chemist or Surgeon; qualified. "Major," 3 Wyndham Street, Marylebone.

TOWN Traveller in good Drug house, or as Manager of branch, outdoors; experienced. "Dextrine," 5 Finsbury Park Avenue, N.

EDINBURGH.—Part-time; tall; aged 22; Prescriber; good address; abstainer; good Counterman. Douglas, Lambeth Walk, London.

BRANCH Manager, or Dispenser to Doctor or Hospital; over 20 years' experience; good references. "Chemicus," 45 Theobald's Road, W.C.

WANTED, part or whole time situation in London, at once; good references. "Antipyrin," c/o Mr. Stephens, 13 St. Peter's Street, Islington, N.

JUNIOR, 19, tall, abstainer, 3 years' experience high-class Country trade, seeks engagement in London. R. Payne, High Street, Saffron Walden, Essex.

LOCUM-TENENS or permanency, by experienced Major; first-class Salesman, Dispenser, and Prescriber. "Major," 3 Arlington Road, Brixton, London, S.W.

MANAGER or otherwise; good-class experience, North and South; Tooth Extractor, &c.; 11 years' experience; aged 27; height 5 ft. 8½ in.; good references. "Spes," Vale View House, Leyburn, Yorks.

MISCELLANEOUS.

PHARMACEUTICAL SOCIETY OF IRELAND.—Professor Tichborne, LL.D., will deliver a Lecture on the 1st of November, 1892, at 8 o'clock P.M., in the Examination Hall of the Society, 67 Gower Street. Subject: "Carbonic Acid." This meeting is free to all members of the Pharmaceutical Society, Associate Druggists, and their Assistants.

IN Bankruptcy.—"Lion" Ointment and Medicines.—The Registered Trade-mark of this valuable property, registered in seven countries, for immediate sale. Apply, Robert Dyas, Auctioneer, 87 and 88 Fore Street, E.C.

NOW Ready, British Pharmaceutical Conference Group of Members, taken at Killin, August 25, 1892, with complete key; price 6s. Sydney Keith, 69 St. Clerk Street, Edinburgh.

EUCALYPTUS Oil.—An established Distiller is prepared to contract for regular supplies of excellent oil up to 10 cwt. a month. Samples and full particulars on application to A. J. Hampson, Bendigo, Victoria.

TO Owners of Proprietary Articles.—Time and money saved by sending inquiries *re* Advertising, Billposting, and Circular Addressing, or Hand Distribution (throughout the United Kingdom), to the well-known London Advertising Contractors, Bassett, Ritson & Co., 21 & 22 Temple Chambers, London, E.C. Telegrams: "Utopianism, London."

TO Home Manufacturers and Continental Houses Agency.—Two energetic gentlemen with good connection amongst the best buyers, office in the Midlands, are open for additional agencies; goods must be of quick sale amongst Chemists and the trade generally, bearing good commission. Apply, with full particulars, to "Essence," 26 Reginald Street, Derby.

SMELLING SALT OR PERFUME BOTTLES FITTED WITH SCREW NICKEL TOPS.

JOB line of about 50 gross of the above, in assorted colours suitable for Christmas trade; very attractive; price 15s. per gross, in half-dozen boxes; sample three dozen, 5s.; carriage paid. Hearn, Eclipse Glass Works, Clapton, London.

PRELIMINARY AND MINOR.

STUDENTS! Write to-day for a "Guide to Examination," gratis and post free, giving the best advice how to prepare. Knotty Points in Latin Grammar, 1s. 6d.; Cæsar Simplified, 1s.; Metric System Simplified, 1s.; How to Write an Essay, 3d.; Equations Simplified, 1s.; Student's Herbarium, 100 specimens, 7s. 6d., post free. Mr. J. Tully (Hills Prizeman), Chemist, Hastings.

LONDON AND LANCASHIRE

FIRE INSURANCE COMPANY.

Head Offices { 45 DALE STREET, LIVERPOOL. 74 KING WILLIAM STREET, LONDON.

West-end Branch: 26 PALL MALL, S.W.

Annual Income ... £801,000.
Funds in Hand ... £1,026,000.

Premiums Moderate. Losses settled with promptitude and liberality.

Applications for Agencies specially invited from Chemists and Druggists in both Town and Country Districts.

EXCHANGE COLUMN.

See page 16.

If you have no surplus stock to Advertise just now keep this Form for future use.

Printed by SPOTTISWOODE & Co., New-street Square; and Published at the Office, 42 Cannon Street, in the City of London.—*October 29, 1892.*

Telephone Number, 1852. Telegraphic Address—CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

INDEX TO ADVERTISEMENTS APPEARING IN THIS ISSUE.

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

	Foot of Page
Allen & Hanburys	Cover
Auderston's Apothecaries' Hall	50
Anglo-American Drug Co.	40
Apollinaris Co.	Cover
Assistants Wanted and Wanting Situations	Coloured Supplement
Barclay & Sons	50
Barnett & Foster	26
Barradell, J. P.	64
Barron, Harveys & Co.	53
Beecham, T.	52
Berdoe & Co.	Coloured Supplement
Benard, C., & Co.	54
Berkefeld Filter Co.	28
Berkley, J.	10
Bleasdale & Co.	52
Blondeau & Co.	7
Blyton, Astley & Co.	4
Boehm, Fredk.	55
Boord & Son	26
Botwright & Grey	13
Bovril (Lim.)	28
Bowers Bros.	13
Bratby & Hinchliffe	25
Brett, F. J.	Coloured Supplement
Bromley, C.	61
Brooks, T.	60
Brunner Mond & Co.	28
Burn, H.	60
Burroughs Bros.	64
Burroughs, J.	26
Burroughs, Wellcome & Co.	30, 33, 34, 53
Bush, A. P., & Co.	60
Bush, H. W., & Co.	22
Bush, W. J., & Co.	22
Businesses for Disposal	Coloured Supplement
Cadbury Bros.	Cover
Chancellor & Co.	56
Christy, T., & Co.	60
Cocking & Co.	6
Coward, G. F., & Co.	60
Crawshaw, E., & Co.	29
Crocker & Co.	Coloured Supplement
Davenport, J. T.	46
Davis, J. (Lim.)	55
Davis, J., & Co.	14
Day & Sons	Text 646
Dee Oil Co.	55
Delacre, O.	11
Dodge & Olcott	41
Dorothy Dentifrice	12
Eade's Pills	61
Edwards & Co.	63
Elliman, Sons & Co.	Text 646
Eschmann, Bros. & Walsh	64
Exchange Column	16
Fariua, J. M.	8
Fellows' Syrup of Hypophosphite	30
Fentiman & Co.	61
Ferris & Co.	48
Fink, F., & Co.	60
Fletcher, Fletcher & Stevenson	61
	Text 646
Fletcher Bros. & Co.	60
Ford, Shapland & Co.	14
Fordham & Sons	18
Francis' Capsicum Leaves	25
Fuerst Bros	48
Gilbert, J. A., & Co.	61
Glover & Co.	25
Goodall, Backhouse & Co.	27
Griffiths, W.	13
Grindley & Co.	54
Grossmith, Son & Co.	9
Halviva Co	61
Harrison, T. H.	11
Harrolne Pill Co.	50
Hassall & Co.	23
Hay, W.	24
Haywood, J. H.	59
Hearon, Squire & Francis	34
Herschell, Dr.	13
Hewlett, C. J., & Son	44
Hildebrande	16
Hodgkinsons, Treacher & Clarke	51
Hooper, B., & Co.	42
Hopgood & Co.	12
Horn & Son	60
Hudson & Co.	60
Hulsen, J., & Co.	25
Issacs & Co.	64
Jewsbury & Brown	24
Jeyes' Sanitary Compounds Co.	57
Johnsen & Jörgensen	64
Jones & Co.	56
Kay Bros. (Lim.)	50
Keene & Ashwell	66
King, F., & Co. (Lim.)	28
Kühn, B.	53
Leath & Ross	3
Leo & Co.	47
Levermore, Ang., & Co.	60
Lipton's Teas	28
Liquor Carnis Co. (Lim.)	37
Lloyd, T. H., & Co.	43
Lofthouse & Saltmer	47
London and Lancashire Insurance Co.	Coloured Supplement
London Homœopathic Hospital and Medical School	13
Lorenz, H.	61
Lynch & Co.	Cover
Mackey, Mackey & Co.	48
Martindale, W.	51
Mason, C. E., & Co.	8
Maw, S., Son & Thompson	64
May & Baker	Cover
May, Roberts & Co.	5
McGeary, J.	61
McKesson & Robbins	39
Melin, C.	52
Millar, A., & Co.	25
Möller, P.	53
Morison's Pills	60
Morris & Callard	67
Moss, J., & Co.	Text 646
Mumford, G. S.	Text 646
Natali, E.	60
Nestlé, H.	29
Newball & Mason	29
Newsholme, G. T. W.	13
Newsome, C.	16
Nicholls Medical Hall	61
Oppenheimer, Son & Co. (Lim.)	31
Orridge & Co.	Coloured Supplement
Pascall, J.	29
Pattison, G.	17
Pears, A. & F. (Lim.)	35
Petersen, M., & Co.	61
Pinch & Co.	61
Pontifex & Wood	54
Potter & Clarke	65
Pyn-ka	56
Quelch, H. C.	11
Raimes & Co.	44
Raybould & Co.	61
Richardson, J., & Co. (Leicester) Lim.	45
Robinson, B.	26
Robinson, J., & Co.	52
Rookledge, F. E.	54
Rosmarine Manufacturing Co.	9
Rowntree & Co.	26
Sainsbury, S.	60
Salamon & Co.	60
Sanitas, The, Co. (Lim.)	Text 646
Sauter Electro-Homœopathic Co.	50
Schlesinger, L.	60
Schweppe & Co.	Text 646
Sheffield College	13
Shipkoff & Co.	12
Silicated Carbon Co.	Text 646
Silverlock, H.	14
Smith, Stephen, & Co.	21
Snowdon, Sons & Co.	16
Solazzi	27
Solport Bros.	59
Southwell, C., & Co.	28
Sozio & Andrioli	8
Stipendum Stopper Co.	58
Tangyes (Lim.)	64
Tasmanian Eucalyptus Co.	55
Thiellay, E. H.	61
Tombarel Frères	6
Toogood, W.	58
Treatt, R. C.	12
Truefitt, H. P. (Lim.)	11
Typke & King	51
Tyrer, P.	15
Vaccine Association	50
Vogeler, Chas. A., & Co.	32
Walker, Troke & Co.	61
Washington Chem. Co.	48
White, Fairchild & Co.	26
Wills & Wootton	13
Wood, Cooper & Co.	42
Woodward, W.	31
Wright, Layman & Umney	Text 646
Wyeth Bros.	36
Zimmermann, A. & M.	49

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear in the preceding Index are published in one of the other issues of this month.

ACETIC ACID
Fuerst Bros.
Greeff, R. W., & Co.
Morris & Callard (Salts)

ADVERTISING SPECIALITIES
Baird Clock Co.
Lawton, J. W.
Sears, F. W.

AERTD & MINRLS
Apollinaris Co.
Barnett & Foster
Chemists' Aerated Waters Association (Lim.)
Ellis & Son (Ruthin)
Hassall & Co. | Hay, W
Hulsen, J., & Co.
Idris & Co.
Ingram & Royle
Jewsbury & Brown
Johannis Spring (Lim.
Mills & Co. (Bourne)
Schweppe, J., & Co

DITTO PLANT
[See SYPHONS and ESSENCES.]
Barnett & Foster
Bratby & Hinchliffe (Lim.)
Gueret Frères
Tyler, Hayward, & Co.

AGNCIES ABROAD
Australian Drug Co.
Kempthorne, Prosser & Co.
Lennon, B. G., & Co. [(N.Z.)
Levy, Jules
Peake, Allen & Co.
Prosser, Taylor & Co.
Rooke, Tompsitt & Co. (Melbourne)
Sharland & Co.
Soul. W. H., & Co.

ALKALOIDS
Howards & Sons (Cinchona)
Smith, T. & H., & Co.

ALMANACKS
Ford, Shapland & Co
Hildesheimer & Faulkner
Silverlock, H.
Townsend, J.

AMMONIA
May & Baker (Lim.)
White, A., & Sons
Woolley, Sons & Co.

APPARATUS
Hicks, J. J.
Ohlson, A.
Orme, J., & Co (Scientific)
Perken, Son & Rayment
Poths, H., & Co.

BAKING POWDER
Goodall, Backhouse & Co.

BANDAGES
Bailey, W. H., & Son
Robinson & Sons
Schutze, F., & Co.
Warne & Co.

BEESWAX
Boehm, F.

BICARB. SODA
Brunner, Mond & Co. (Lim.)
Howards & Sons
May & Baker (Lim.)

BISMUTH PREP.
Hearon, Squire & Francis
Hewlett & Sons
Howards & Sons
May & Baker (Lim.)
Symes & Co. | Tyrer, T., & Co.
White, Alfred, & Sons

BOOKS
Griffiths, W.
Gurney & Jackson
Hargreaves, Dr., M.D.
Herschell, Dr. | Muter, Dr.

BORAX
Howards & Sons
Mack's Starch

BOTTLES
Aire & Calder Bottle Co. (Lim.)
Barnett & Foster
Barradell, J. P., & Co.
Barrett, R. H.
Bratby & Hinchliffe (Lim.)
Bush, H. W., & Co.
Evans, Sons & Co.
Gilbertson, H., & Sons
Hearn, E. A., & Co.
Isaacs & Co.
Johnsen & Jörgensen
Kilner Bros.
Poths, H., & Co.
Shirley, A. W.
Toogood, W.
"W. Brand Bottles"
Youldon, F.

BOXES
Austin & Co. (Cardboard)
Evans, Sons & Co.
Parmenter, I. W., & Co (Lim.)
Robinson & Sons

BRUSHES
Evans, Sons & Co.

BUNSEN BURNERS
Berend & Co.

BUTTER COLR, &c.
Boulton, J. & Co. (Lim.)
Crawshaw & Co.
Oldfield, Pattinson & Co.

CAMPHOR
Fuerst Bros.
Howards & Sons
May & Baker (Lim.)

CAPSULES
Denoual, J. (Medicinal)
Duncan, Flockhart & Co.
Evans, Sons & Co.
Hooper, B., & Co.
Macon, C. E., & Co.
Richardson, John, & Co. (Leicester), Lim.

CSCRA SAGRADA
Duncan, Flockhart & Co.
Evans, Sons & Co.
Ferris & Co. | Moss, J., & Co

CASTOR OIL
Allen & Hanbury [Fuerst Bros
Christy & Co. (Aromasicum)
Greeff, R. W., & Co.
The Lofoden Cod Liver Oil Co.

CATALOGUE
Maw S., Son & Thompson
May, Roberts & Co.
Sanger & Sons'

CHECK TILLS
National Cash Till Co.
Patent Voucher Check Till Co. (Lim.)

CHLRIDE OF LIME
Government Sanitary Co.
National Chemical Co.

CHEMICALS
Boehm, F.
Boehringer, C. F., & Sohne
Boulton, J., & Co. (Lim.)
Bramwell, E., & Son
Brunner, Mond & Co. (Lim.)
Fletcher Fletcher & Stevenson
Fuerst Bros.
Goodall, Backhouse & Co.
Greeff, R. W., & Co.
Harrington Bros.
Hill, A. S., & Son [Clark
Hodgkinsons, Treacher &
Howards & Sons (Pharm.)
Levermore, Ang., & Co.
Lofthouse & Saltmer
Lorenz, H.
May & Baker (Lim.)
Morris & Callard | Moss
Smith, T. & H., & Co.
Tyrer, T., & Co.
Washington Chemical Co.
White, A., & Sons
Zimmermann, A. & M.

CHEST PROTCTRS
Chemists' Association (Lim.)
Hockin, Wileon & Co.
Liverpool Patent Lint Co.
Lynch & Co.
Newbery, F., & Sons
Pattison, G. | Solport Bros.

CHLORODYNE
Davenport (Browns's
Towle, A. P. & Son

CHLOROFORM, &c.
Duncan, Flockhart & Co.
Greeff, R. W., & Co.
Macfarlan, J. F., & Son
Salamon & Co. (Lim.)
Smith, T. & H., & Co.
Wright, Layman & Umney
Zimmermann, A. & M.

CITRIC ACID
Hassall & Co. (Phospho)

COCAINE-HYDRO.
Howards & Sons

COCA WINE
Armbrecht, Nelson & Co.
French Hygienic Soc.
Stephen Smith & Co. (Hall's)

COCOA & CHOCLTE
Cadbury Bros. | Christy & Co
Rowntree & Co.

COD-LIVER OIL
Allen & Hanburys
Burroughs, Wellcome & Co.
Evans, Sons & Co.
Greeff, R. W., & Co.
Hill, A. S., & Son
Hockin, Wilson & Co.
Lofthouse & Saltmer
Smith, T. J.
The Lofoden Cod Liver Oil Co.
Woolley, Sons & Co.

COFFEE
Symington, T., & Co. (Coffee) Essence)

COLLAPSIBLE TUBES
Betts & Co.

COMP. MEDICINES
Allen & Hanburys
Blyton, Astley & Co.
Burroughs, Wellcome & Co.
Fuerst Bros.
Hooper, B., & Co. | Leo & Co.
Leo & Co.
Lloyd, T. H., & Co.

CONCENT. LIQS.
Fletcher, Fletcher & Stevenson
Lloyd, T. H., & Co.
Wood, Cooper & Co.

CONFECTIONERY
Blyton, Astley & Co.
Crawshaw & Co.
Gibson, R., & Sons
Guest, T., & Co.
Pascall J.
Southwell, C., & Co.
Warrick Brothers

CORN CURES
Pattison, G.
Solport Bros.

COTTON WOOL
Haynes, G., & Co. (Absorbent)
Robinson & Sons (Absorbent)
Sanger, J., & Sons
Seabury & Johnson

CRSHD LINSEED
Graham, W., & Co.
Mumford, S. G.

DENTIFRICES
Beecham, T.
Bronnley, H., & Co.
Jewsbury & Brown
Lakeman, J. J.
Quelch, H. O.
Spurin, R. C. (Dorothy)
Stevens, P. A.
Sutton, O., & Co.
Thompson & Capper
Warrick Bros. | Wilson, A.
Woods, W. (Areca Nut)

DISINFECTANTS
Calvert, F. C., and Co.
Dussex Bros., & Co.
Fletcher Bros. & Co.
Government Sanitary Co.
Grindley & Co. (Lim.)
Jeyes' Fluid
Mason, C. E., & Co.
National Chemical Co.
Sanitas Co.
Seabury & Johnson
Star Chemical Co.
Tyrer, Thos., & Co.

DISPENSING BOTTLES
The Lofoden Cod Liver Oil Co.

DOG MEDICINES
Spratts Patent (Lim.)

DRUGGISTS' SUN.
Ayrton & Saunders
Bailey, M., & Co.
Barclay & Sons (Limited)
Beaulette Co.
Bush, H. W., Co.
Chemists' Association (Lim.)
Chemists' Mineral Water Association (Lim.)
Evans, Lescher & Webb
Evans, Sons & Co. (Savars)
Fordham, W. B., & Sons (Lim)
Gilbertson, H., & Sons
Hanbury & Co.
Hocklu Wilson & Co.
Idris & Co.
Kay Bros. (Lim.)
Lynch & Co. (Lim.)
May, Roberts & Co.
Newbery, F., & Sons
Quelch, H. O.
Sanger & Sons
Schutze & Co.
Tidman & Son Toogood W.
Wood, Vincent Young, J.

DRUG MILLS
Burroughs, Wellcome & Co.

DYES, &c.
Crawshaw & Co.

EAU DE COLOGNE
Farina, J. M.
Hockin, Wilson & Co. (Farina)
Martin. Maria (Num)
Oscar, Moenich & Co.

ELECTRIC APPAR.
Darton, F., & Co.
Gent & Co.
Orme & Co.

EMBROCATION
Burn, H.
Day & Sons
Elliman, Sons & Co.

ENEMAS
Evans, Sons & Co.
Sanger & Son
Warne & Co.

ENGRAVERS
Barker, W., & Son
Corean, J. R.

ESSENCES
Beckett, W.
Berger, F.
Boehm, F.
Boulton, J., & Co.
Bratby & Hinchliffe (Lim.)
Burgoyne, Burbidges & Co.
Bush, W. J., & Co.
Fletcher, Fletcher & Stevenson
Goodall, Backhouse & Co.
Hay, W.
Idris & Co.
May & Baker (Lim.)
Newbald & Mason
Oldfield, Pattinson & Co.
Stevenson & Howell
Tyrer, P. (Anchovies)
Tyrer, T., & Co.
Woolley, Sons & Co.

ESSENTIAL OILS
Berger, F.
Boehm, F.
Bush, W. J., & Co.
Chiris, A.
Clay, Dod & Co.
Cocking & Co. (Japan Peppermint)
Dodge & Olcott
Evans, Sons & Co.
Hodgkinsons. Treacher & Clarke
Lewig, M.
May & Baker (Lim.)
Robert Frères
Sozio & Andrioli
Schlesinger, L.
Stevenson & Howell
Symes & Co.
Tombarel Freres
Treatt, R. C.
Vogt, G., & Co.
Warrick Bros.
Wright, Layman & Umney

ETHER
Duncan, Flockhart & Co.
Howards & Sons
May & Baker (Lim.)
Robbins, J., & Co.
Tyrer, T., & Co.
White, A., & Sons
Woolley, Sons & Co.
Wright, Layman & Umney

EUCALYPTUS
Downie B. I. P. Co.
Drysdale, J. W. & Co.
Evans, Lescher, & Webb
Fletcher, Fletcher & Stevenson [Co.
Tasmanian Eucalyptus Oil
Vogt G., & Co.

EXTRACT MEAT
Brand & Co.
Bush's Liquid Beef
Denaeyer's Peptone and Extract of Meat Co. (Lim.)
Idris & Co. (Viking Co.)
Liebig Co.
Liquor Carnis Co. (Lim)
Mason, G., & Co. (Lim.)
Wyeth, J., & Brother

EXTRACTS, FLUID
Allen & Hanburys
Anderson & Co.
Barber, G., & Co.
Burgoyne, Burbidges & Co.
Evans, Sons & Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire & Francis
Hooper, B., & Co.
Lloyd, T., Howard & Co.
Moss & Co.
Potter & Clarke
Vogt, G., & Co.
Wright, Layman & Umney

FEEDING BOTTLE
Burroughs, Wellcome & Co. (Thermo Safe)
Chemists' Association (Lim.)
Evans, Sons & Co.
Hearn, E. A., & Co.
Hockin, Wilson & Co.
Kilner Bros.
Lynch & Co.
Marriott, E., & Co.
May, Roberts & Co.
Maw, S. Son & Thompson

FILTERING
Berkefeld Filter Co.
Fordham, W. B., & Sons (Ld.)
Mawson, Swan & Weddell
Silicated Carbon Filter Co.

FLESH GLOVES
Pattison, G.

FLY PAPERS
Ford, Shapland & Co.
Mather, W.
Maw, S., Son, & Thompson
Tunbridge & Wright
Wilson, S.

FOOD (Infants' & Invalids')
Allen & Hanburys
Benger's Food
Brand & Co.
Evans, Sons & Co.
Goodall, Backhouse & Co.
Hearon, Squire & Francis
Idris & Co.
Liebig Co.
Liquor Carnis Co. (Lim.)
Nestlé, H.

FORMULA
Brooks, T.

GINGER ALE
Hay, W. (Essence)
Mills. R. M., & Co.

GLYCERINE
Blyton Astley & Co. (Pastilles)
Boehm, F. | Fiuk & Co.
Fuerst Bros.
Greeff, R. W., & Co.
Lynch & Co.
Price's Candle Co.
The Lofoden Cod Liver Oil Co.

GOUT AND RHEUMATIC PILLS
Bromley, C.

GRANULAR PREP.
Bishop, A., & Sons
Evans, Sons & Co.
Hearon, Squire & Francis
Lloyd, T. H., & Co.
Wright, Layman & Umney

GRIPE WATER
Woodward, W.

GUM
Fiuk & Co. (Arabic, &c.)
Greeff, R. W., & Co.
Levermore, Aug., & Co.

HAIR PREP.
Anglo-American Drug Co. (Lim.)
Chesebrough Mnfg. Co.
Edwards & Co.
Truefitt, H. P. (Lim.)

HERBALISTS
Newball & Mason
Potter & Clarke

HERB BEER EXTS
Newball & Mason
Oldfield, Pattinson & Co.
Potter & Clarke

HOMŒOPATHIC
Keene & Ashwell
Leath & Ross
Thompson & Capper
Watson & Wates

HYPOPHOSPHITES
Duncan, Flockhart & Co.
Fellows
Fletcher, Fletcher & Co.
Symes & Co.
Tyrer, Thomas, & Co.

INHALERS
Burroughs, Wellcome & Co.
Hockin, Wilson & Co.
Lynch & Co. (Lim.)
Spirone, Co., The
Toogood, W.

INK [SEE MARKING INKS]
Bewley & Draper

INSECTICIDES
Keating, T.
Steiner & Co.

INSURANCE
London and Lancashire Fire Insurance Co.

KETCHUP
Tyrer, P.

LANOLINE
Burroughs, Wellcome & Co.

LARD
Ewen, J., & Sons

LIME JUICE
Southwell, C., & Co.

LINT
Liverpool Lint Co.
Newsome, C.
Robinson & Sons
Seabury & Johnson

LIQUORICE
Fergusson & Forster (Solazzi)

LITHIA
Fuerst Bros.

LOZENGES
Allen & Hanburys
Blyton, Astley & Co.
Gibson, R., & Sons (Manfrs.)
Hill & Son
Jackson, T.
Raimes & Co.
Warrick Bros.

MACHINERY
Bennett, Sons, & Shears
Burroughs, Wellcome & Co.
Gardner, W.
Leete, Edwards & Norman, Ld.
Ohlson, A.
Pindar, J. W.
Pontifex & Wood (Lim.)
Werner & Pfleiderer (Kneading and Sifting)

MAGNESIA
Bush, W., Son & Co.
Evans, Sons & Co.
Greeff, R. W., & Co.
Henry, T. & W. (Calcined)
Hill & Sons, A. S.
Washington Chemical

MALT EXTRCT, &c.
Allen & Hanburys
Anderson & Co.
Burroughs, Wellcome & Co. (Kepler's)
Hearon, Squire & Francis
Raimes & Co.
Richardson, John, & Co. (Leicester), Lim.
The Lofoden Cod Liver Oil Co.
Wyleys & Co.

MANICURE PREP.
Dr. Paul's

MARKING INKS
Barber, G., & Co. (Crimson)
Bond, John (Crystal Palace) (Ink and Pencils)
Perry & Co. (Pencil)

MEDICINE CHSTS
Burroughs, Wellcome & Co.
Day, Son & Hewitt (Veterinary)
Day & Sons (Veterinary)

MENTHOL
A 1 Menthol Depot, A. W. Shirley, Proprietor.
Cocking & Co.
Evans, Sons & Co.
Hockin, Wilson & Co.
Seabury & Johnson
Tyrer, P.

MERCURIALS
Fuerst Brothers
Howards & Sons
May & Baker (Lim.)
Tyrer, Thomas, & Co.

METH. SPIRITS, &c.
Boord & Son
Burrough, J.
Harvey, J. & W., & Co
Jones & Co.
Phillips, G., & Co
Smith, S., & Co.

METHYLENE
Robbins, J., & Co.

MICROSCOPES
Darton, F., & Co.
Newsholme, G. T. W. (Slides)
Perken, Son & Rayment

MILK
Nestlé, H. (Condensed)

MORPHIA
Macfarlan, J. F., & Co.
Smith, T. & H., & Co.

OILS, PAINTS, &c
Fleming, A. B., & Co. (Lim.)
Fox, W., & Sons

OINTMENT BASES
Burroughs, Wellcome & Co.
Chesebrough (Vaseline)
Grindley & Co. (Petroleum Jelly)
Richardson, J., & Co, (Lim.)

OPTICIANS
Botwright & Grey
Darton, F., & Co.
Perken, Son & Rayment

OTTO OF ROSE
Fuerst Bros.
Shipkoff & Co.
Treatt, R. C.

PETROLEUM
Allen & Hanburys
Barclay & Sons (Lim.)
Dee Oil Co. (Lim.)
Fuerst Bros. (Jelly)
Grindley & Co. (Jelly)

PAPAIN
Kuhn B. (Dr. Finkler)

PATENT AGENTS
Horn & Son

PATENT MEDCNS
Anglo-American Drug Co. (Lim.)
Atkinson & Barber (Infant Preserv)
Barclay & Sons (Lim.
Beecham, T. (Pills)
Bow's, Dr., Liniment
Bromley, C. (Gout and Rheu.)
Chemists' Association
Clarke's Blood Mixture
Edwards & Son
Evans, Lescher & Webb
Fenning's (Powders)
Goodall, Backhouse & Co.
Guy's Tonic
Hakka Cream (A. P. Bush & Co.)
Holloway (Pills and Oint.)
Hovenden & Sons
Kreat Halviva
Lalor (Phosphodyne, &c.)
May, Roberts & Co.
Morison's Ointment
Newbery & Sons
Roberts & Co. (Foreign)
Sequah (Lim.)
Sutton, W., & Co.
Wilson, A. (Bunter's Nervine)
Zirrizmah

PEPSINE, &c.
Armour & Co.
Burroughs, Wellcome & Co.
Chassaing & Co.
Fletcher, Fletcher & Stevenson
Greeff, R. W., & Co.
Newbery, F. & Sons (Inglavin)
Stern, G. & G.
Warner & Co. (Inglavin)
Wyleys (Lim.)

PEPPERMINT OIL
Bush, W. J., & Co.
Cocking & Co.
Stevenson & Howell

PERFUMERY, FANCY SOAPS
Barclay & Sons, Lim.
Bayley & Co.
Beaulette Co.
Blondeau & Cie.
Boehm, F.
Brooks, T. (Solid Perfume)
Burroughs, Wellcome & Co.
Bush, W., & Co.
Cavallier Frères
Chemists' Association (Lim.)
Chesebrough Manufctrng Co.
Chiris, A.
Evans, Sons & Co.
Ewen, J., & Sons
Farina, J. M.
Girard Fils
Grossmith, J., & Sons
Hovenden & Sons
Mulhens, F.
Newbery & Sons (Berdoes)
Oftinger, E.
Pears' Soap (Lim.)
Price's Patent Candle Co.
Robert Frères
Rosmarine Manfg. Co.
Sainsbury, S. (Lav. Water)
Shirley, A. W.
Sozio & Andrioli
Tidman & Son
Tombarel Freres
Treatt, R. C.
Truefitt, H. P. (Lim.)
Warrick Brothers
West, T. (Okell's Mona)
Woolley, Sons & Co. (Powder)

PEROX. OF HYDR
Robbins & Co.

PHARM. PREPS.
Allen & Hanburys
Anderson & Co.
Barron, Harveys & Co.
Battley & Watts
Berger, F. | Boehm, F.
Boehringer, C. F., & Sons
Boulton, J., & Co. (Lim.)
Burgoyne, Burbidges & Co.
Burroughs, Wellcome & Co.
Chassaing & Co.
Delacre, Ch., & Co.
Duncan, Flockhart & Co.
Ferris & Co.
Fletcher, Fletcher & Co.
Giles Schacht & Co.
Greeff, R. W., & Co.
Hearon, Squire & Francis
Hewlett & Son
Howards & Sons
Jeyes Sanitary Compounds Co
Keith & Co. (Conc. Tinctures
Kingsford & Co.
Lambert Pharmacal Co.
Largen, G. W.
Learmount, W. D. ("Neptulina")
May & Baker (Lim.
Moss, J., & Co.
Oppenheimer, Son & Co. (Lim.)
Potter & Clarke
Richardson, John, & Co. Leicester), Lim.
Ricqles & Co. | Roberts & Co
Smith & Sons
Smith, T. & H., & Co.
Southall Bros. & Barclay
Sutton, W., & Co.
Symes & Co.
Tyrer, T., & Co.
White, Alfred, & Sons
Woolley, Sons & Co.
Wride Bros.
Wyleys & Co.

PHOTOGRAPHIC
Barclay & Sons (Lim.)
Blackfriars Photographic Co.
Botwright & Grey
Darton, F., & Co.
Fallowfield, J.
Greeff, R. W., & Co.
Griffiths, W., & Co. (Lim.
Houghton, G., & Sons
Howards & Son (Chemicals
Orme, J., & Co.
Perken, Son & Rayment
Tyrer, T., & Co.
White, Alfred & Sons
Zimmerman & Co.

PILL MACHINES
Pindar, J. W.
Toogood, W. (Coater)
Werner and Pfleiderer

PILLS (Coated, &c.)
Allen & Hanburys
Anderston Apothecaries' Hall
Beecham, Thomas
Bromley, C. (Gout and Rheu.
Eade's Gout Pills
Evans, Sons & Co.
Harroline Pill Co.
Hearon, Squire & Francis
Hill, A. S., & Son | Holloway's
Lloyd, T., Howard & Co.
McKesson & Robbins
Morison's
Newbery & Sons
Nicholls' Medical Hall
Richardson, J., & Co. (Lim.)
Wand, S. (Pearl Coated)
Warner, W. R. & Co (Coated)
Wride & Co. | Wyleys & Co.

PLASTERS
Evans, Sons and Co.
Johnson and Johnson
St. Dalmas, A.
Seabury and Johnson (Lim.)

PODOPHYLLIN, &c.
Keith, B., and Co.
Smith, T. and H., and Co.

POLISHING
Bradley & Bourdas (Albatum)
Flesher, Raybould & Co.
Fordham, W. B., & Sons (Lim.
Oakey, John, and Sons
Pyn-ka Syndicate (Lim.)
Stephens & Co.

PORCELAIN GOODS
Toogood, (E.c. Pots. varied.)

POULTRY FOOD
Spratt's Patent (Lim.)

PRECIP. CHALK
Levermore, Aug., & Co.

PRINTING
Bowers Bros.
Corsan, J. R. (Giase)
Ford, Shanland and Co.
Hildesheimer & Faulkner
Silverlock, H. (Townsend, J.
Townsend, J.

PUMILINE
Stern, G. and G.

QUININE SALTS
Boehringer, C. F., & Sohne
Greeff, R. W., and Co.
Howards and Sons
Zimmermann A. & M.

RENNET
Duncan, Flockhart and Co.
Greeff, R. W., and Co.
Oldfield, Pattinson and Co.

SACCHARIN
Allen and Hanburys
Burroughs Bros.
Burroughs, Wellcome and Co.

SALICIN
Macfarlan and Co.
Smith, T. and H., and Co

SALICYLIC ACID
Burgoyne, Burbidges and Co.
Fnerst Bros.
Zimmermann, A. and M.

SALT
Stern, G. and G. (Papsalis)

SCHOOLS, &c.
City School of Chemistry and Pharmacy (Lim.)
Liverpool School of Pharmacy
London Homœopathic and Medical School
Manchester Col. of Pharmacy
Northern School of Pharmacy
Owens College
Sheffield School of Pharmacy
South London School of Pharmacy (Lim.)
Royal College of Science
The School of Pharmacy
University of Edinburgh
Westminster College

SAUCES, PICKLES
Goodall, Backhouse and Co.
Mason, G., and Co. (Lim.)
Tyrer, P.

SEALING WAX
Savage & Co. (Holder)

SEEDS
Potter & Clarke

SELTZOGENES
Brathy and Hinchliffe (Ld.
Evans, Sons and Co
Fordham, W. B., & Sons (Lim.)
Lynch and Co. (Lim.)
May, Roberts and Co

SHAVING
Hovenden & Sons (Euxesis)
Lloyd, Mrs. A. S. (Euxesis)

SHEEP DIP
Fletcher Bros. & Co.
Jevons, W. B.
Jeyes Sanitary Compounds Co

SHOP FITTERS
Bowling and Govier
Bygrave, J. and W.
Natall, E.
Poths, H., and Co.
S. Howlett
Treble, G., and Co.

SOAP
Ayrton and Saunders
Parclay and Sons (Lim.)
Blondeau and Co. (Vinolia)
Bronnley, H., and Co.
Calvert, F. C., and Co.
Cook, E., and Co.
Fordham, W. B., & Sons (Ld.)
Jeyes' Sanitary Compounds Co.
Mulhens, F.
Pears' Soap
Price, Napoleon, & Co.
Wright, Layman & Umney

SPECTACLES
Botwright and Gray
Darton, F. and Co.
Perken, Son and Rayment

SPONGES
Cresswell Bros. & Schmitz
Evans, Sons and Co.
Peterson, M., and Co.

STAMPS (RUBBER)
Berkley, J.
Hickisson, J.

STARCH
Chancellor & Co. (Mack's Double)
Critchley (Gloss)

STOPPERS
Austin and Co. (Sprinklers)
Barnett and Foster
Melin, C.
Stipendum Stopper Co.

STOVES
Clark, S., and Co. Lim.)

SUGAR
Fletcher, Fletcher and Stevenson
Gibson, R., and Sons

SUGAR OF MILK
Burroughs Bros.

SULFONAL
Burroughs, Wellcome and Co.
Greeff, R. W., and Co.
May and Baker (Limited)

SURGICAL
Ayrton and Saunders
Bailey, W. H., and Son
Barclay and Sons (Limited)
Cocking, J. T.
Harrison, T. H.
Haywood, J. H.
Krohne and Sesemann
Liverpool Patent Lint Co.
Lindsey & Sons
Powell & Barstow
Quelch, H. C.
Richardson, John, & Co. (Leicester), Lim.
Robinson and Sons
Schutze, F. and Co.
Warne & Co.
Wood, Vincent

SYPHONS
Barnett and Foster
Brathy and Hinchliffe (Ld.)
British Syphon Co.
Fordham, W. B., & Sons (Lim.)
Geraut, E., & Co.
Idris and Co.
Kilner Bros.
Melin, C.
Schweppe, J., & Co.

SYRUPS
Anderson & Co.
Fletcher, Fletcher (Liquers)
Idris and Co.
Wood, Cooper & Co.

TABLETS
Blyton, Astley & Co. (Sulphur)
Corsan, J. R. (advertising)

TEA
Cave, Johnson & Co.
Est. Tower St. Tea Co.
Lipton
Walker and Dalrymple

TEETHING PADS
Marriott, E., & Co.

THERMOMETERS
Bailey, W. H., and Son
Barclay and Sons (Lim.)
Darton, F., and Co.
Evans, Sons and Co.
Hicks, J. J.
Perken Son and Rayment

TOBACCO, CIGARS, CIGARETTE
Taddy and Co.

TOILET
Allen & Hanburys (Chrisma)
Balm of Bethesda
Burroughs, Wellcome & Co. (Lanoline)
Dee Oil Co. (Lim.)
Hovenden & Sons
Quelch, H. C.
Rowland, A., and Sons
Truefitt, H. P. (Limited)

TOOTH PASTE
Anglo-American Drug Co. (Lim.)
Beecham, T.
Jewsbury and Brown
Sutton, O. and Co. (Block)
Wilson, A. (Bunter's)
Woods, M. (Areca)

TRADE MARKS
Fleuret, J. B.
Horn & Son
Trade Mark Agency

TRUSSES
Bailey, W. H., and Son
Evans, Sons & Co.
Haywood, J. H.
Lindsey & Sons
Wood, V.

URETHANE
Howards & Sons

VACCINATION
Himes, Dr.
Vaccine Association (Lymph

VASELINE
Chesebrough Manufacturing Co.

VALUERS AND TRANSFR. AGENTS
Berdoe and Co.
Brett, F. J.
Crocker, G. B., & Co.
Orridge and Co.

VETERINARY
Bird & Storey | Day and Son
Day, Son and Hewitt
Ellman, Sons and Co
James, W. H. (Blisters
Jeyes' Sanitary Compounds
Lloyd, T., Howard & Co.
Rookledge, F. E.
Spratts (Dogs)
Walker, Troks and Co
Wyleys, Lim

VINOLIA (Superf'tt'd)
Blondsan and Co

WHOLESALE AND EXPRT DRGGSTS
Allen and Hanburys
Anderson & Co.
Barron, Harveys and Co.
Battley and Watts
Burgoyne, Burbidges and C
Bush, W., and Co.
Bush, W. J., and Co.
Clay, Dod and Co.
Coward, G. F., & Co.
Delacre, Ch., & Co.
Evans, Sons and Co.
Evans, Lescher and Webb
Ferris and Co.
Fox, W., and Sons
Goodall, Backhouse and Co.
Harker, Stagg and Morgan
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hodgkinsons, Treacher and Co
Lofthouse and Saltmer
Lloyd, T., Howard and Co.
Macfarlan, J. F., and Co.
Oldfield, Pattison and Co.
Potter and Clarks
Richardson, J., and Co.
Smith & Sons
Symes & Co.
Thompson and Capper
Walker, Troke and Co.
Willows, Francis and Butler
Woolley Jas., Sons and Co.
Wright, Layman and Umney
Wyleys, Lim.

WINES, SPIRITS
Armbrecht, Nelson and Co. (Coca)
Goodall, Backhouse and Co
French Hygienic Soey. (Coca)
Idris & Co.
Millar, A., & Co. (Orange)
Robinson, B.
Rose & Co.

HALL'S COCA WINE

A HIGH-CLASS MEDICATED WINE AT A REASONABLE PRICE

THE LATEST TESTIMONY TO THE EXCELLENCE OF HALL'S COCA WINE.

"The Lancet," April 9th, 1892.

HALL'S COCA WINE (STEPHEN SMITH & CO., BOW, E.)

This is an excellent Wine, with an alcoholic strength equal to good port, possessing a similar flavour and bouquet, but associated with it also is the peculiar though pleasant aroma of the fresh Coca leaf. Ether when shaken with the Alkalised Wine yielded a residue on evaporation which with hydrochloric acid gave characteristic Crystals of Cocaine hydrochlorate; they were further identified by the numbing effect produced by the Crystals when rubbed on the tip of the tongue. Analysis gave the following data: Alcohol, 15 per cent. by weight, 18·50 per cent. by volume; total solid matter, 18·73 per cent. (sugar and coca principles); mineral matter, 0·33 per cent. The restorative and invigorating properties of the Coca leaf are now well known, and it may be very conveniently and palatably administered in the form of an agreeable Wine such as that under examination, a wineglassful of which is stated to contain one drachm of the soluble active ingredients of the leaves.

STEPHEN SMITH & CO., BOW, LONDON.

POTTER & MOORE'S

BLACK AND WHITE

MITCHAM

PEPPERMINT OILS

NEW CROP (1892) NOW READY.

ALSO

OIL LAVENDER,

MITCHAM,

OIL CAMOMILE,

MITCHAM.

WRITE FOR PARTICULARS AND PRICES TO

W. J. BUSH & CO.

(Proprietors of Potter & Moore),

18 ARTILLERY LANE, LONDON.

HASSALL & CO.'S

PURE

PHOSPHORIC ACID

(PLATINA BRAND).

1,500 & 1,750 S.G.

HASSALL & CO.

KING'S CROSS, LONDON.

Reuter's Cables—"REMPUJARON LONDON."

SEASON 1892.

JEWSBURY & BROWN'S, MANCHESTER,

AERATED WATERS and BEVERAGES. Specially prepared for a first-class Family Trade. Chemists who have not hitherto sold these Waters are solicited to apply for Prices and Terms. Trade Lists, sample Counter Bills, and Analytical Reports will be sent on application. JEWSBURY & BROWN Pay Carriage on Waters and Returned Empties.

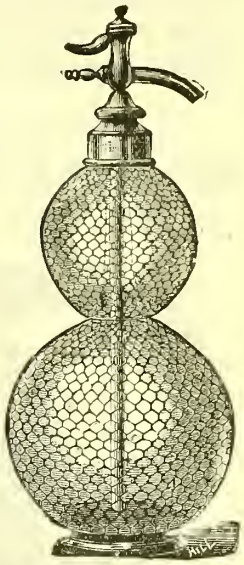
SYPHONS & SELTZOGENES

Messrs. J. PARRE JOHNSTONE & CO., 20 Loftus St. Sydney N.S.W., Agents for New South Wales, Queensland, and New Zealand.

81 ROBERTSON STREET, GLASGOW.

Messrs. NOYES BROS., 43 Queen Street, Melbourne, Victoria, Agents for Victoria, South and West Australia, and Tasmania.

All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving the works.



PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

SELTZOGENES.

1	2	3	4	5	8 pint.
5/6	6/2	7/	8/	9/11	15/6 each.

Including two funnels and stopper for charging.

SOLIDIFIED SULPHURIC ACID.

A Chemical Compound, containing 72-75 per cent. available concentrated Acid.

Also Hyposulphite of Soda, pure white Sulphate of Alumina, Hydrate and Anhydrous Alumina, Blanc Fixe, Chloride, Nitrate, Sulphide, and Hydrate of Barium.

SOLE AGENTS:—**JULIUS HULSEN & CO.**, NEWCASTLE-ON-TYNE.

PURE ORANGE WINE

(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopœia.

MOST SUITABLE BASIS FOR QUININE AND OTHER MEDICATED WINES.

A. MILLAR & CO., DUBLIN; and 47 MARK LANE, LONDON, E.C.

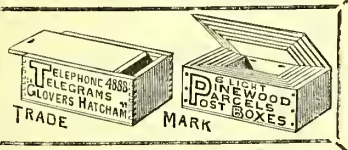
Or of H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

"A CAPITAL IDEA"!!

Said friend JONES, the GO-AHEAD CHEMIST. "I'VE DOUBLED MY TRADE last year since I commenced packing all my customers' prescriptions in Glover's small wood boxes."

And JONES CHUCKLED!!

WOODEN BOXES ALL SIZES MADE TO ORDER



PRICES. 14/- per dozen nests of six boxes, planed & hinged, sizes ranging from 5"×2½"×1½" to 9¾"×6¾"×4½", inside measure. *Special Terms for large quantities and to Shippers.*

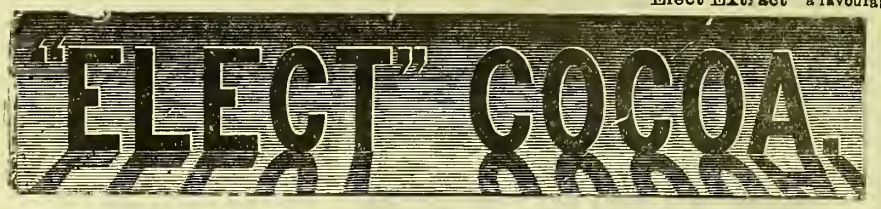
"CAPITAL, INDEED"!!!

Said the Colonial Shipper. "Those light nested boxes, shipped in cases (each containing ½-gross nests), are just what is wanted, and I am getting repeat orders doubled. We are all indebted to the Makers, Messrs. C. H. GLOVER & CO., of Hatcham Sawmills, Ormside St., Old Kent Road, LONDON, S.E."!!

REGISTERED.—More effectual than Mustard Leaves. May be obtained through any Wholesale House. 6d. Tins, price 2s. 8d. per dozen.

CAPSICUM is highly recommended in *The Lancet* by Sir J—— S——, M.D., and Dr. H—— J—— B—— for the treatment of Rheumatism, Neuralgia, Bronchitis, Bronchial Catarrh, Sub-acute Gout, &c.

ROWNTREE'S



The "MEDICAL PRESS AND CIRCULAR":—
"Certainly this preparation is of delicate flavour . . . It is perfectly soluble . . . the small quantity required for the *immediate* production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee.'

The "BRITISH MEDICAL JOURNAL" says:—
"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND.

WHITE, FAIRCHILD & CO.

ESTABLISHED 1847.

Offices—30 GREAT TOWER STREET, E.C. Mills—WHITECHAPEL, E.

Speciality—CANISTER COFFEES.

These Coffees have been before the Public for nearly 50 years, and are the very best of their kind.

ROBINSON'S
LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,
Lecturer on Materia Medica in the Owens College, Manchester (Victoria University.)
December 15, 1888.

Introduced 1855.] **ROBINSON'S CONCENTRATED WATERS.** [Introduced 1855.

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopœia, and free from all Chemical impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Fœniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent. 4/
" Anisi " 4/ "	" Cassiæ " 4/ "	" Menth. Pip. " 4/ "	" Rosæ " 6/6
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" " Ang. " 6/ "	" Rosæ Virgin " 10/6
" Carui " 4/ "	" Flor. Sambuci " 8/6 "	" " Virid. " 4/ "	

The above are put up in Bottles of ½lb. or 1lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, *July* 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are *excellent in quality*, and will be very useful, especially in country practice. [1]

Wholesale Agents: HARBON & CO., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

THE "NIAGARA" BOTTLE, or IMPROVED CODD'S,

Is the most perfect Bottle in the Market, and the easiest and quickest to open.

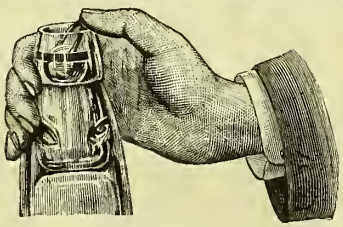
SEND FOR SAMPLE AND COMPARE!

Prices on application.

Extra Rings, 1*s.* 6*d.* per gross; printed with name of owner, 2*d.* per gross extra.

PATENT "ATTACHED" OPENER.

Price 3*s.* per gross. Tongs for fitting same 3*s.* each.



Illustrated Catalogue forwarded free upon application to

BARNETT & FOSTER,

"Niagara Works," 26T Eagle Wharf Road, LONDON, N.

BUY THE

"LONDON-MADE"

SYPHON

(Title Registered)

AND SUPPORT BRITISH INDUSTRY.

It is the cheapest, strongest, handsomest and best in the World.

Pure Block Tin Tops.

PRICE 1/6 EACH.

Nickel-plating Tops from 4*d.* each.
Silver-plating Tops from 6*d.* each.
Marking on Tops Free for orders of 250, smaller quantities steel die charged for.
Marking on Vases Free for orders of 1,000, smaller quantities plate charged 7*s.* 6*d.* upwards.

"HEALTH" says:—

"By Far the Best and Purest."

"SOLAZZI."

This is the purest **LIQUORICE JUICE** obtainable; it is a guaranteed specific —in fact,

NATURE'S OWN REMEDY

—for Winter Coughs, Colds, and all Chest Affections.

Chemists should stock and push this article, as a safe and effective remedy, provided by kindly Nature—in preference to Patent medicines, which, in these days, yield only the barest profit. To be had, with Show Cards and Handbills, of

ALL WHOLESALE HOUSES.

"THE CHEMIST AND DRUGGIST" says:—

"The Most Esteemed of All."

EIGHT PRIZE MEDALS AWARDED.

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6*d.*, 1*s.*, & 2*s.* each.

GOODALL'S BAKING POWDER.

The Best in the World. 1*d.* Packets; 6*d.*, 1*s.*, 2*s.*, and 5*s.* Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1*d.* Packets; 6*d.*, 1*s.*, and 5*s.* Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2*d.*, 6*d.*, & 1*s.* each.

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6*d.* and 1*s.* each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6*d.*, 1*s.*, and 2*s.* each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3*d.* and 6*d.*

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6*d.* & 1*s.* Bottles.

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1*s.*, 2*s.*, and 5*s.* each.

GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6*d.*, 1*s.*, and 2*s.*

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In ½-pint, 1-pint and Quart Boxes, 3*d.*, 6*d.*, and 1*s.* each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS.

PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

LIPTON'S TEAS.

DIRECT FROM THE TEA GARDEN TO THE TEAPOT.

NO MIDDLEMEN'S PROFITS TO PAY.

RICH, PURE, and FRAGRANT. 1s. and 1s. 4d. per lb.

THE FINEST TEA THE WORLD CAN PRODUCE.

1s. 7d. per lb. No higher price. 5 lbs., 7 lbs., 10 lbs., and 20 lbs. packed in patent fancy airtight canisters without extra charge.

SPECIAL NOTICE.

DELIVERED CARRIAGE PAID for an extra 1d. per lb. to any address in Great Britain on orders of 5 lbs. and upwards. Samples sent free on application.

A GUARANTEE: Money returned in full if Tea does not give perfect satisfaction in every way.

LIPTON

TEA AND COFFEE PLANTER, CEYLON.

LONDON BRANCHES:—

Angel House, Islington, N.; 19 High Street, Kingsland; 203 Old Street, E.C.; 240 and 242 Edgware Road, W.; 68 Westbourne Grove, W.; 87 Chrisp Street, Poplar; 417 Brixton Road, S.W.; 321 Walworth Road, S.E.; 98 Rye Lane, Peckham; 18 St. John's Road, Clapham Junction; 13 High Street, Deptford; 144 Trafalgar Road, East Greenwich; High Road (adjoining the Plough Inn), Tottenham; 245 High Street, Camden Town, N.W.; 128 Lambeth Walk; 18 and 20 Strutton Ground, Westminster; 233 Wandsworth Road; 11 Seven Sisters Road; 3 and 4 Citsdel Buildings, High Street, Walthamstow; High Street, Harlesden, Willesden Junction; 151 King Street, Hammersmith; 233 North End Road, Fulham; 44 North End, Croydon; Angel Lane, Stratford; 11 Chapel Street, Somers Town; 132 High Street, Stoke Newington; 6 Little Pulteney Street, Soho; 63 New Cut, Lambeth; 1 Hare Street, Woolwich; 143 Salmon's Lane, Limehouse; 284 Barking Road, Canning Town. Branches in all principal towns of the kingdom.

PROMISE LITTLE!

DO MUCH!!

TRY a Table-spoonful or two of EDWARDS' DESICCATED SOUP in any Soup you may be making in the usual way, and

The Result will Surprise You!

One Pound will make Six Quarts. It is unequalled for enriching all Gravies, Soups, Hashes, Stews, &c. Sold everywhere. Cookery Book, post free. Sole Proprietors—F. KING & Co., Limited, 3-6 Camomile Street, E.C.

BOVRIL,

THE GUARANTEED PRODUCT OF PRIME OX BEEF.

WHOLESALE PRICE—
12/6 & 21/6,
LESS USUAL DISCOUNT.

INVALID BOVRIL
SPECIALLY PREPARED FOR INVALIDS.
SOLD ONLY BY CHEMISTS.

RETAIL PRICE—
1/3 & 2/-
PER POT.

50 times more Nourishing than Meat Extract or Beef Tea.

CHAS. SOUTHWELL & CO.

SOLE MAKERS OF THE

EXCELSIOR TABLE JELLIES

In Packets of half-pint, pint, and quart, costing less than one-third of the ordinary Bottled Jellies.

BLACK CURRANT
ORANGE
LEMON
CALFSFOOT
VANILLA
NOYEAU
CHERRY
STRAWBERRY
RASPBERRY
PINE APPLE

PRICE LIST ON APPLICATION.

CHAS. SOUTHWELL & CO.

WHOLESALE AND EXPORT CONFECTIONERS,

DOCKHEAD, LONDON, S.E.

28

THE

BERKEFELD - NORDTMEYER FILTER.

THE LANCET, September 12, 1891:—"We have put the Berkefeld Filter through many rigid tests; we have not obtained the slightest evidence which would enable us to contest any of the statements made in regard to this filter."

ADVANTAGES.

Rapid, Perfect, and Permanent Filtration.
Easy Cleaning and Sterilization
All Descriptions Supplied.

See Illustrated 4-page Circular, Jan. 30.

THE BERKEFELD FILTER CO., 121 OXFORD ST., LONDON, W.
LOCAL AGENTS APPOINTED.

NESTLÉ'S FOOD.

AN ENTIRE DIET FOR INFANTS.

Supplies all the elements necessary for the complete nourishment and growth of the human frame.

Nestlé's Food, being partly composed of milk, is complete and entire in itself, and requires simply the addition of water to make it instantly ready for use. It is not merely an auxiliary, like other Infants' Foods, which require milk to be added in preparing for use.

Recommended by the highest medical authorities as the nearest equivalent to MOTHERS' MILK.

Pamphlet, with Medical Testimonials, with sample sufficient for a fair trial, sent post free on application to

H. NESTLÉ, 9 SNOW HILL, LONDON, E.C.

CRAWSHAW'S CRYSTAL DYES.

1d., 3d., 6d.

THESE Dyes are specially Manufactured for the purpose of affording to heads of families and others the means of Dyeing at home, for a small cost, Faded Articles of Wearing Apparel, &c. Silks, Ribbons, Feathers, Woollen Goods, and Stuffs of all descriptions, take the Dye readily. They are easy to use; they are economical in price. The colours are beautiful and brilliant, and anything can be dyed with them in a few minutes. One Sixpenny Packet of the Crystals will go as far as six Sixpenny Bottles of the ordinary Liquid Dyes. Each colour will produce any desired shade of its own colour, according to the quantity used. There is sufficient in a Sixpenny Packet to Dye a Lady's Dress, or Half-a-dozen Children's Frocks, or a Hundred Yards of Ribbon, &c., &c.

☞ *Chemists who have not yet tried these Dyes will find it to their advantage to do so. There is no loss or mess from leakage and broken bottles, and their great utility and superiority has been abundantly proved wherever they have been tried.*

E. CRAWSHAW & CO., 80 FANN ST., ALDERSGATE ST., LONDON, E.C.

A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.

ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of

HERB OR BOTANIC BEER

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

BEWARE of mean and fraudulent imitations.
BEWARE of others copying our title.
MASON'S is the original and only genuine.
MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/-, & 2/- each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.
Ginger, Orange, Lemon, Raspberry, Black Currant, &c.
These are having a very large sale now, and are extensively advertised.
Sold in Bottles, at 6d., 1s., and 2s. each.
Quotations on Application.

SOLE INVENTORS AND MANUFACTURERS: NEWBALL & MASON,
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM.

ONE BY ONE!

PASCALL'S SILVER CACHOUS

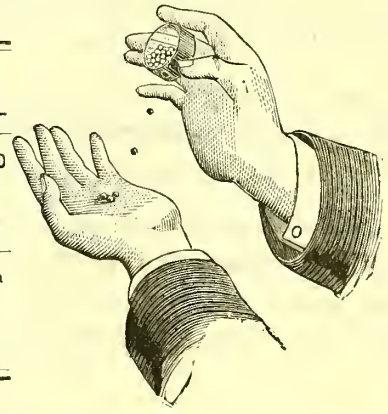
BRILLIANTLY POLISHED.
FRAGRANT AROMA.
FINEST IN THE MARKET.

IN ROUND PATENT BOXES, MADE TO RELEASE ONE BY ONE.

QUITE NOVEL

PREFERRED TO ALL OTHERS.

In 1 dozen Outer Boxes.



Most Saleable

2/3 per dozen. In 1-lb. Bottles 3/6 per lb.

Of the usual Wholesale Houses, and of the Manufacturer,

JAS. PASCALL, Blackfriars Rd., LONDON, S.E.

SYR. HYPOPHOS. CO., FELLOWS

CONTAINS THE ESSENTIAL ELEMENTS of the Animal Organisation—Potash and Lime;

THE OXIDISING AGENTS—Iron and Manganese;

THE TONICS—Quinine and Strychnine;

AND THE VITALISING CONSTITUENT—Phosphorus: the whole combined in the form of a Syrup with a **SLIGHTLY ALKALINE REACTION.**

IT DIFFERS IN ITS EFFECTS FROM ALL ANALOGOUS PREPARATIONS, and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

IT HAS GAINED A WIDE REPUTATION, particularly in the treatment of Pulmonary Tuberculosis Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.

ITS CURATIVE POWER is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

ITS ACTION IS PROMPT; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; *hence the preparation is of great value in the treatment of mental and nervous affections.* From the fact also that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE—CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, FINDS THAT NO TWO OF THEM ARE IDENTICAL, and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, IN THE PROPERTY OF RETAINING THE STRYCHNINE IN SOLUTION, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. FELLOWS."

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles (4/- or 7/-): the distinguishing marks which the bottles (and the wrappers surrounding them) bear can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

WHOLESALE AGENTS—

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

"Are sure to become Popular.
We can confidently recommend them."
—*Edinburgh Medical Journal.*

The extreme accuracy of dosage of "Palatinoids" and "Bipalatinoids" has been a subject of much comment among the Profession and Trade. This, added to the many other advantages possessed by these forms of medication, place them far ahead of their competitors.

THE "BIPALATINOID" OF BLAUD'S PILL

Is now universally acknowledged as being the only reliable method for the pure administration of ferrous carbonate. It holds its own, and is in large demand. We prepare ferrous phosphate, arseniate and hypophosphite pure by the same means. Chemists will do well to bring them under the notice of their local Medical men, as they bear the usual dispensing margin of profit.

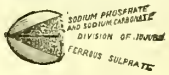
'PALATINOID' & 'BI-PALATINOID'

Before immersion in water.

"PALATINOID" OPENED.

"BI-PALATINOID" (FERROUS CARBONATE)

"BI-PALATINOID" (FERROUS PHOSPHATE)



After three minutes' immersion in water at normal temperature of stomach.

OPPENHEIMER, SON & CO., LTD., 14 WORSHIP STREET, E.C.

WOODWARD'S

"GRIPE WATER"

TRADE MARK.

TRADE MARK.

NOTICE

The Proprietor guarantees that "WOODWARD'S GRIPE WATER" contains NONE of the SCHEDULED POISONS.

FOR WHOLESALE AND SHIPPING TERMS APPLY

THE PROPRIETOR, CHAUCER STREET, NOTTINGHAM.

31

VOGELER'S CURATIVE COMPOUND

25 PER CENT. PROFIT TO THE RETAIL DEALER.

Our friends the Chemists who wish to encourage our efforts to prevent cutting should, if they have not already done so, place Vogeler's Curative Compound in stock. Our advertisements are already appearing in a large number of newspapers, and will appear in all papers in which St. Jacobs Oil appears as soon as we are able to place same. All our books and pamphlets (several millions now being distributed, others in Press, and still others being written) contain the advertisements of the Compound. In fact, we started this remedy to make it a standard medicine, and shall do so. All of this, however, cannot be done in a day. We labour under no little disadvantage, and a great amount of additional expense, by adhering to our plan to prevent cutting. We are continually obliged to decline to execute orders for the Compound from firms who are among our best customers for St. Jacobs Oil, but who will not sign an Agreement not to cut the price of the Compound. Again, some of the largest wholesale houses refuse to stock the goods because they "won't be bothered" with the detail of getting Agreement Forms signed, &c.

Furthermore, in order to concede 25 per cent. to the retail dealer we obtain only 10*s.* 2*d.* nett for the 1*s.* 1½*d.* size of the Compound, while other standard medicines in this size sell at from 11*s.* to 11*s.* 6*d.* per dozen.

From the foregoing our friends will readily observe that we are sacrificing much in our effort to test the question of whether or not it is possible for a Manufacturer of a Patent Medicine to control the advertised marked price on the bottle. All we ask of Chemists is to place the goods in stock and sell them when they are called for, and we naturally think that we are only asking a just and reasonable thing, especially as we are always ready to take back and pay cash for any goods bearing our name which after a reasonable time are found to be unsaleable. We do not anticipate this with Vogeler's Curative Compound, for we intend to make it as staple and standard as St. Jacobs Oil.

PRICE LIST, CASH WITH ORDER.

1/1½ SIZE VOGELER'S CURATIVE COMPOUND, 13/6, LESS 25 PER CENT.
2/6 " " " " 30/ " "

CARRIAGE PAID. NO CHARGE FOR BOXES.

P.P. THE CHARLES A. VOGELER CO.
(WILLIAM E. GEDDES, European Manager.)
45 FARRINGDON ROAD, LONDON.

KEPLER EXTRACT OF MALT.

PREPARED ONLY FROM PURE MALTED BARLEY OF THE BEST SELECTED QUALITY

PROPERTIES

It is light in colour, agreeable in flavour, and especially rich in the valuable properties of Malt—viz, Diastase, Dextrine, Malt Sugar, Albuminoids, Phosphates, &c.

NON-ALCOHOLIC.

The Kepler Extract of Malt is not a fermented product. The nutritive properties are not sacrificed to the formation of alcohol, nor the digestive properties destroyed by heat. It is prepared *in vacuo* at a very low temperature.

NUTRITIOUS.

The Kepler Extract of Malt is highly nutritious for every part of the organisation. It supplies an assimilable form of sugar which is not liable to acetous fermentation, as is the case with cane sugar. Its phosphates having passed through the vitalising process of plant life are more readily assimilated than phosphates chemically prepared, and its albuminoids and dextrine are ready for immediate assimilation. As a bone-former it is, perhaps, unequalled, and is largely prescribed by surgeons in cases of rickets, deficient bony structure, &c.

AS GOOD AS OIL.

The Kepler Extract of Malt is prescribed by many physicians in place of Cod Liver Oil, and eminent medical authorities pronounce Extract of Malt to be preferable to Cod Liver Oil. As, however, the administration of fat is desirable in many cases, the Kepler Solution of Cod Liver Oil constitutes an ideal fat, which is perfectly suitable for nourishing every part of the human frame.

DIGESTIVE.

The Kepler Extract of Malt is a powerful digestive agent owing to the perfect preservation of its diastase in an active form, and repeated analysis has proved the Kepler Extract of Malt to be superior to ordinary articles in this respect.

EMOLLIENT.

The Kepler Extract of Malt possesses remarkable emollient properties. It also acts as a natural regulator of the bowels, and is useful in small doses in diarrhœa and catarrh of the bowels, it being readily assimilated when other foods are rejected. In large doses it is an efficient aperient in constipation.

IN NURSING.

As a food in fevers and in cases of mal-assimilation the Kepler Extract of Malt is probably unequalled. It may be given alone or mixed with soda-water, and it forms a very agreeable beverage when mixed with half milk and half soda-water. When mixed with milk it possesses the remarkable property of preventing the heavy clot which forms upon the addition of acid, and undoubtedly one of the best foods for infants and invalids is made by adding a table-spoonful of the Extract to half-pint of milk, with a pinch of bicarbonate of soda, which neutralises the slight acidity usually present in milk.

IN CONSUMPTION.

"The introduction of the Kepler Extract of Malt," says THE LANCET, "constitutes as important an advance in therapeutics as was the introduction of Cod Liver Oil." This statement is borne out by the fact that the Kepler Extract of Malt is now used in all the principal hospitals in Great Britain and the Colonies, and as the LONDON MEDICAL RECORD states, "is the Extract which every physician now prescribes."

NO OTHER NAME.

The Kepler Extract of Malt is known by no other name, and should be prescribed as "Kepler Extract of Malt," or "Extractum Malti-Kepler," when the physicians will secure a superior product at a reasonable price.

SAMPLES FREE.

Supplied to the Trade in ¾-lb. and 1½-lb. bottles, at 20*s.* and 36*s.* per doz. Retail, 2*s.* 6*d.* and 4*s.* each. Above prices subject to the usual discount.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

THE "ABC" MEDICAL DIARY and VISITING LIST FOR 1893.

WITH THE "EXCERPTA THERAPEUTICA."

This Medical Diary and Visiting List has, in past years, been held in the highest favour by medical men, and chemists who may be desirous of making presents to their professional clients, cannot choose a more appropriate or one better appreciated.

The Diary for 1893 is superior in every way to previous editions; it is considered by doctors with extensive work in general practice to be all that can be desired. It is made most convenient for the pocket, and is supplied either for 56 or 112 patients monthly, according to requirements.

PRICES.

With Silk Binding	2/6 each.
With Leather Tuck Covers	2/6 ,,
WALLETS ONLY.	
Morocco	2/- ,,
Pigskin	2/- ,,
Velvet Pile	3/- ,,
Russia Leather	3/- ,,
DIARIES AND WALLETS TOGETHER.	
Morocco	4/- ,,
Pigskin	4/- ,,
Velvet Pile	5/- ,,
Russia Leather	5/- ,,

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

Telegraphic Address—"Francis London."

TRADE MARK.

HEARON, SQUIRE & FRANCIS,

Analytical and Manufacturing Chemists.

PURE DRUGS AND CHEMICALS.

ESTABLISHED AT 95 BISHOPSGATE ST., 1714.

MAKERS OF

CONCENTRATED LIQUORS FOR SYRUPS.

CONCENTRATED WATERS, 1 TO 40.

GRANULAR EFFERVESCENT SALTS.

Pill Consistence, and in Powder. **EXTRACTS.** Liquid, B.P., B.P.C., U.S.P.

AND OF

EVERY CLASS OF PHARMACEUTICAL GALENICALS.

INFANTS' FOOD MALTED

In Bulk, or in Tins with plain labels.

NEUTRAL AND CLOUDY. **SYR. HYPOPHOS. CO.** NEUTRAL AND BRIGHT.

NOTE.—Evaporation of Pharmaceutical Preparations conducted in Vacuo.

38 SOUTHWARK STREET, LONDON.

THE CHEMIST AND DRUGGIST

ESTABLISHED 1859 AS A MONTHLY. SINCE MARCH, 1886, A WEEKLY JOURNAL.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICE, FINK'S BUILDINGS, MELBOURNE, AUSTRALASIA.

Subscription 10s. per year, payable in advance, including a copy of THE CHEMISTS' AND DRUGGISTS' DIARY next to be published, post free to every country in the world. New subscriptions should date from the commencement of any month.

Supplied only to persons connected with the Trade.
Single copies 4d. each.

Cheques and Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN'S BANK (LIMITED).

SUPPLIED regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ.

The Pharmaceutical Society of Ireland.
South African Pharmaceutical Association.
The Midland Pharmaceutical Association of New Zealand.
The Central Association of New Zealand.
Otago Pharmaceutical Association.
The Pharmaceutical Society of Queensland.
The Pharmaceutical Society of South Australia.
Tasmanian Pharmaceutical Society.

Literary Contents.

	PAGE
Bankruptcy Reports	645
Brewers' Exhibition	639
Business Changes	653
Commentary	650
Correspondence:—	
"Veterinary Counter Practice"; The October Examinations; Examiners' Latin, &c.	660
Dispensing Notes	660
Legal Queries	661
Miscellaneous Inquiries	661
Deaths	654
Deed of Arrangement	648
Editorial Comments:—	
Pharmacy and Poison Laws	643
Mr. Mond's Chlorine Researches	647
Continental Patent Medicines	648
Newspapers and the Sale of Poisons	649
English News	632
Foreign and Colonial News	635
French Pharmaceutical News	635
Gazette	637
Irish Licence Examination	642
Irish News	634
Legal Reports	643
Major Examination	641
Marriages	654
Modern Pharmaceutical Journalism	642
New Companies	654
Scotch News	634
Solutions of Medicinal Resins. By Harold Wyatt, junr.	653
The Winter Session	637
Tincture of Green Hellebore. By R. Wright and E. H. Farr	651
Trade-marks Applied for	653
Trade Notes	653
Trade Report	655

Summary.

M. LIPPMANN, the Parisian professor, has made further advances in regard to photography in colour.

THE statutory meeting of the Chemists' Association (Limited) has been held, and progress reported.

A PERSON at Cardiff who calls himself a chemist and druggist has been fined for the illicit sale of beer.

THE fourteenth annual Brewers' Exhibition is being held this week, and we print some notes gathered by a representative who visited it.

A NORTHERN contemporary is complaining that analysts show lamentable lack of uniformity in their results of the analysis of cattle-foods.

A PARTICK midwife has succeeded in an action for slander-damages which she brought before the Court of Session against a local doctor-druggist.

THE list of Bankruptcy Reports is somewhat heavy this week. The cases refer to chemists and druggists and chemical and colonial brokers.

WE reprint some thoughts by Mr. George J. Seabury on "Modern Pharmaceutical Journalism," which are worthy the attention of all live men of business.

IN an Editorial Note we give particulars regarding such restrictions as there exist upon the sale of medicinal specialities in the principal countries on the Continent.

IT will be seen from our Winter Session section that the Leeds Association has held its twenty-fourth annual meeting. We also report meetings held in Brighton, Dundee, and London, and an important pharmaceutical paper read by Mr. Harold Wyatt, jun., to the Liverpool Students' Association.

THE first of the Scotch University medical examinations under the new ordinance (which admits women to degrees) has been held, and the daughter of a Dundee chemist heads the ladies' list of merit at Glasgow.

IT is reported that Mr. Ludwig Mond has succeeded in making bleaching powder from the waste chloride of the Solvay alkali-process. He passes volatilised ammonium chloride over a magnesia mixture, when ammonia, hydrochloric acid, and chlorine are successively liberated and collected. We give a description of the process.

A MANCHESTER assistant has succeeded in recovering a sum for deferred salary which he had agreed to temporarily forego in order to meet his employer's convenience. The matter was afterwards disputed, and had to be settled by a judge. Another assistant, who claimed salary from an employer, lost his case because the evidence failed to show that he had been engaged by the employer.

THE PHARMACY AND POISON LAWS OF THE UNITED KINGDOM.

Price 2s. 6d. Post free, 2s. 9d.

(Copies will be posted on Monday to subscribers who have ordered this work.)

THIS is the most complete conspectus of the laws governing pharmacy and the sale of poisons in the United Kingdom which has ever appeared. It contains the text of all the statutes (Great Britain and Ireland), and full comments and illustrative cases. Also Hansard's reports of the debates in Parliament before the Pharmacy Acts of 1868 and 1869 were passed, and the *Law Times* reports of the case of the limited company which was argued up to the House of Lords. In appendices are given details of the Pharmacy Laws of the Australasian Colonies, of Canada, and of Cape Colony.

The book will be obtainable through the usual wholesale houses.

Next Week.

Secretaries of Associations and Societies should give the Editor post-card notice of meetings to be held, and the business to be transacted thereat, by Wednesday of the week before.

WEDNESDAY, NOVEMBER 2.—*Edinburgh Chemists' Assistants' and Apprentices' Association*, 36 *York Place*, at 9 Presidential address.

THURSDAY, NOVEMBER 3.—*Chemists' Assistants' Association*, 103 *Great Russell Street, W.C.*, at 9 P.M. Dr. William Hill on "The Prevention of Voice Troubles and Sore Throat."

THURSDAY, NOVEMBER 3.—*Dundee Chemists' Assistants' Association*, at 9 15 P.M. Musical and social evening

b

English News.

The Chemists' Association (Limited).

The formal statutory meeting of this Association (required by the Act to be held within four months of registration) was held at the company's premises, Curtain Road, E C, on Friday, October 21. Mr. Martin Magor (Birmingham), the chairman of directors, presided, and there were also present Messrs. R. Walton, Wm. Hole, L. Walters, W. Corbett, L. Woolley, and T. Fawssett (secretary).

The Chairman said that their undertaking was inaugurated in July last with the design of enabling retail chemists, by co-operation, to trade as wholesale men, and to acquire profits in addition to those accruing from retail trading, being from 20 to 25 per cent. on druggists' sundries, and from 5 to 10 per cent. on patent medicines, less working expenses. The response to the prospectus had been quite equal to expectations. As to the results of the working of the company since it was floated, July was a very broken month. In August, however, there was a material increase, not only on the previous month, but also an increase of 800*l.* on the corresponding month of last year, of Messrs. Thompson, Walters, Hole & Co.'s trading—a most encouraging result, September, again, showed an increase on the returns of August of 500*l.*, and of nearly 950*l.* on those of September, 1891. This increase had accrued without any extension of the staff, and on the same basis of expenditure as that formerly existing; but since then a traveller had been engaged to push the business in the south and east parts of the kingdom, formerly untouched by them. Taking September, which was certainly not the best in the year, as an average month, the profits, unless something unlooked for occurred, would be such as to enable the directors to pay a fair *ad interim* dividend, and also a bonus on the business done, within the next three or four months. There was still room for an increase of membership, and he desired that all the craft should know that by the payment of 25*l.* a membership was assured which gave a fair dividend on the money spent and a bonus on every transaction with the Association.

Mr. Wm. Corbett proposed a vote of thanks to the Chairman, which Mr. L. Woolley seconded. The vote was accorded, and the proceedings terminated.

Drug Contract.

The contract for the supply of whole linseed to Bromley (Kent) Union has been secured by Mr. D. Grinsted, of Bromley, at 2*l.* 14*s.* 10*d.* per two quarters.

Fire.

Seeing flames issuing from the premises of Mr. Collins, chemist, 86 Wells Street, Hackney, on Sunday night, a policeman broke open the door and rescued the inmates—Mr. Collins, his wife, and child—who had ascended to the roof for safety. Later a second outbreak occurred, and the house was completely destroyed.

Fall of a Chemical-works Chimney.

A large chimney, 50 yards high, at the alum-works of Peter Spence & Co, Goole, which had been built some twenty years since, fell with a great crash on Friday of last week. Four men were seriously injured. The chimney was badly crooked, and was being straightened.

Consolations by Poisoning.

A lady, describing herself as Mrs. Gordon, was found in a dying condition at Charing Cross Hotel, and was removed to the Charing Cross Hospital, where she died. From a letter it was evident she had taken a large quantity of chlorodyne for the purpose of suicide, and at the inquest it transpired that there were nine empty chlorodyne-bottles in her room. A doctor was of opinion that it was a case of chlorodyne-poisoning.

Martha Townsend, a servant at Clifton, had tried to kill herself by taking some belladonna, but medical treatment succeeded in saving her life. She was taken to the Bristol Infirmary, and there, watching her opportunity, she was more successful. She got possession of a bottle containing a mixture of iodine and carbolic acid, and took about an ounce of it, with a fatal effect.

Julia Callan, 59, a single woman, residing at Chiswell Street, Finsbury Square, had 300*l.* left her by a former master some three years ago. She never did any work after. At times she would drink to excess, and had been heard to say, "When that money has gone, I shall soon go after it." The money had been spent some time. She poisoned herself with carbolic acid last week.

William Johnson, 61, a tailor, of Acton Street, Gray's Inn Road, who had often told his daughter that he was tired of life, rid himself of it last week by the aid of a draught of carbolic acid.

The Wrong Bottle.

Another of the familiar mistakes with carbolic acid is reported from Bush Hill Park, near Enfield. A woman, desiring to give to an infant a dose of some innocuous medicine, sent a girl of 11 years of age to get the bottle which contained it from the mantelshelf in her bedroom; and in the twilight the child brought a bottle containing carbolic acid lotion, and the woman administered to the infant a teaspoonful of that poison, with painful and fatal results. The bottle which contained the poison was exactly similar in size and shape to that in which the infant's medicine was kept, and so the mistake was one which the Coroner's jury reasonably regarded as falling short of criminal negligence.

Sequah's Servant Suffers through Having No Agreement.

At the Darlington County Court, on October 20, Alfred Bell sued the Sequah Company (Limited) for 17*l.*, balance of wages. The evidence of plaintiff was to the effect that he was engaged by Mr. Bailey, an agent of the Sequah Company, at a salary of 3*l.* 10*s.* a week, to go abroad to manage business for the company. He commenced his engagement at Durham, and sailed last December for Monte Video with Bailey. The company were to give him an agreement, but he was told it was not ready, but would be forwarded to him. Bailey gave him 4*l.*, instead of 14*l.*, for wages. They stayed six weeks at Monte Video, but the Government would not permit them to work. They then went to Barcelona, in Spain, where Bailey discharged him because he did not know the Spanish language The 17*l.* he sued for was the difference between what he received and the amount due. The agreement was to be for three years.

His Honour: You ought to have got the agreement signed before you went out.

The Plaintiff: But the money is owing.

The Judge: It may be owing in one sense, but it is not owing in the sense that you can recover it at law.

His Honour, then, in the absence of any agreement, nonsuited the plaintiff, but did not make any order as to costs.

A Chemist Commended by a Coroner.

Mr. Carttar, Coroner for South-east London, held an inquest last week at Forest Hill on the body of Nancy Florence Fenwick, aged 23, a single woman. The deceased lived with Mr. John Sullivan, a retired solicitor, and was addicted to drinking. She had of late complained of want of sleep. She wanted to take opium, but Mr. Sullivan refused to sanction this. When he returned home one evening he found her dead, and at the inquest he identified as in the deceased's handwriting the words, on a piece of paper, "Please give the bearer sixpennyworth of laudanum for aching face." The paper was taken for the deceased to the shop of Mr. Clarke, chemist, 2 Swiss Terrace, Stanstead Road, Forest Hill, by a lad. Mr. Clarke said he could not serve sixpennyworth, as it was too large a quantity, and gave him threepennyworth, charging 1*d.* for the bottle. Mr. Ethelbert Clarke, chemist, gave evidence to the same effect.

The Coroner: There is no restriction as to the quantity you may supply, I believe?

Witness: None at all.

The Coroner: Well, I think it very creditable, Mr. Clarke, that you refused to sell a larger quantity. It is not every chemist that does so, I find.

Mr. Clarke: I thought threepennyworth would meet the requirements of the case, and that is why I refused to supply more.

A Chemist Charged with the Illicit Sale of Beer.

At the Cardiff Police Court, on Wednesday, William Bateman, described as a chemist and druggist, of Court Road, Saltmead (whose name, however, does not appear on the register), was charged with the illicit sale of beer. A policeman said on Sunday, October 16, he watched the defendant's house, and between 12 noon and 1 P.M. he saw twenty-one men and twenty-five women enter, and twenty-two of the women leave, apparently carrying jugs or bottles under their aprons. At 1 P.M. he, with another policeman, entered the house, and in the passage met a woman, who ran back into the middle room and put a 1½-pint bottle of fresh beer on the table. Mrs. Bateman was washing jugs and glasses in the same room. Witness asked her what beer was sold, and she replied, "Nothing but herb beer." There was also a quart bottle containing beer on the table. In the front room, which was used as a shop, were the defendant, two men, and two women, and a gallon jar about half-full of fresh beer. In a cupboard under the stairs witness found a 4½-gallon cask wet with fresh beer, and which had been recently emptied. In the back garden the soil was noticed to have been recently disturbed, and a 4½-gallon cask, wet with fresh beer about the bunghole and tap, was found buried among the soil. The other constable corroborated. For the defence Mrs. Bateman, defendant's wife, said she made and sold herb beer, and only herb beer, with the exception of a pint of fresh beer which had been got for her husband's supper, was in the house on the day the police entered. A witness supported this statement. The Bench, however, found the case proved, and inflicted a fine of 10*l.* and costs, or a month's hard labour, the vessels to be confiscated.

Get your Whisky in Clerkenwell.

At the last meeting of the Clerkenwell Vestry, Mr. J. K. Colwell, public analyst, sent up his report on articles submitted to him for analysis by the Vestry inspectors during the quarter. There were 50 samples:—7 of butter, 3 adulterated; 6 of milk, 1 adulterated; 11 of ice-cream and 7 of lemon-ice, none adulterated; 8 of rum, 3 adulterated; and 11 of whisky. It was not stated in the report whether any of the whisky was adulterated, and Mr. Weston, whose great point is always as to pure drinks, asked why. Mr. Kelly: Oh, don't bother, Weston! Mr. Weston: Perhaps you will hold your tongue. There are plenty of jackasses on the board without you. (Laughter.) The Chairman (Mr. W. Robson) called the speaker to order, and Mr. Weston, proceeding, said he was pleased to see there were no cases against ice-cream vendors, especially after some people had said London was going to be poisoned by ice-cream from that locality. And now as to the whisky. (Laughter.) They knew as well as he did that there were many places where whisky was sold which was not fit to drink—(hear, hear)—and the analyst had not told them how many of the eleven samples taken were adulterated. The Chairman: None, I take it. The report was received.

The Effect of Justice Hawkins's Judgment.

One of our reporters asks us if it is usual for the chemist to refer the applicant for vermin-poisons to the oilman over the way; or does the chemist only do this when he suspects his customer? The other day a very mild-looking man asked at a chemist's in Islington for three-pennyworth of rat-destroyer. A lady happened to be behind the counter, and she rather severely made reply: "Not here; at the oilman's, over the way." And the stuff got at the oilman's had no apparent effect upon the vermin.

Does the Board Provide "The Art of Dispensing"?

Though at all times there are plenty of applications for vacant appointments, the applicants are not so ready as some might suppose to do all that is asked of them. There were about thirty applicants for the post of medical officer (resident) at the City Road Workhouse, and Dr. Norton, assistant at the Highgate Infirmary, got the position. The next gentleman in point of favour with the Holborn Board of Guardians was called into the board-room and asked if he would take the place vacated by Dr. Norton. "Certainly," he said, he would. "And will you be prepared to do your own dispensing?" "Ah, that requires consideration. I will, if you please, think over it and let you know." This was allowed by the Guardians, and the result at present is unknown.

A Dishonest Carman.

At the Hanley Quarter Sessions on October 21, William Cotton, carman, in the employment of Mr. Lewis Amable Fresson, chemist and druggist, Parliament Row, Hanley, was indicted for having stolen the sum of 1*l.* Mr. Doddam, who appeared for the prosecution, said prisoner was employed by his client in clearing certain premises in Tontine Street, Hanley, from which prosecutor was removing to Parliament Row, on June 15 last, and the money was stolen from a package on the shelf.

The prisoner, who had been previously convicted seven times, made no defence.

The Recorder said, considering the prisoner's past record, it was a question as to whether he should not be sent to penal servitude.

Prisoner: I wish you would, with all my heart.

The Recorder, continuing, said no doubt prisoner had been exposed to sudden temptation, and he was very hard up at the time he committed the offence, therefore he would let him off with nine months' imprisonment.

Killed Rather than Cured.

At the Liverpool Police Court on October 20, before the Stipendiary, a respectably-dressed man named Collins, described as a pill maker and vendor, was charged with assaulting Catherine Scott, of 58 Baptist Street, Liverpool. From the complainant's evidence it appeared that when prisoner went home on the previous evening she refused him admittance, owing to his having failed to pay his rent. The only money she had received from him was 3*s.* in return for a sum she had lent him, in order that he might be enabled to purchase the ingredients from which he manufactured his pills. Prisoner assaulted her with a poker, and from her appearance—her head being covered in bandages—she must have been roughly handled. The prisoner made a statement to the effect that he had been a lodger, and went to the house to take away his property. As he was going out of the door, carrying his bundle, complainant rushed at him with a poker, and somehow she fell down and hurt herself. He admitted having broken several panes of glass. Considerable amusement was caused whilst the case was proceeding by complainant exclaiming that her experience was that prisoner's pills killed rather than cured people. The Stipendiary inflicted a fine of 5*s.* and costs.

The Mattei Medicines.

The *Medical Press and Circular* has been threatened with an action for libel by a firm of solicitors acting on behalf of Count Mattei, for stating that his remedy is utterly valueless for the purpose for which it is recommended, and that it is in every respect a delusion and a snare. "From that position," says our contemporary, "we are not prepared to retire."

Lectures on Pharmacy Law.

Mr. Wm. Kirkby, lecturer on pharmacognosy at the Owens College, delivered in the college on Wednesday night the first of a series of lectures on "Pharmacy Law." The subject is apparently not regarded with much interest in Manchester, as the attendance was very small. Invitations to attend had been given to the members of the local Association, but only two of them—Mr. W. Lane and Mr. A. Blackburn—put in an appearance. The lecture proved an interesting one, worthy of a much larger audience. It might, perhaps, seem presumptuous, Mr. Kirkby said, for him to pose as an exponent of pharmacy law, but pharmacy law was now included in the examination schedules, and it was possible that they might get a better knowledge of the subject from a pharmacist than from one who looked at the subject from a purely legal standpoint. In this hope he entered upon his task. Reserving details for future lectures, Mr. Kirkby passed in general review the laws as they have and do affect dealers in drugs, beginning with the old apothecaries, of whom, he said, the pharmacists of to-day were the lineal descendants.

Irish News.

Pharmaceutical Society's Evening Meetings.

These meetings, which have been allowed to lapse for some years, are about to be revived. The opening meeting of the season will be held on Monday evening, November 1, at 8 o'clock, in the Society's House, 67 Lower Mount Street, when Professor Tichborne will deliver a lecture on "Carbonic Acid" and show experiments of much interest.

Enough Grievances on Hand.

The Irish Medical Poor-law officers have been refused an interview by the Chief Secretary on the subject of their grievances.

100 Grains of Chloral Would not Kill.

On Saturday last an inquest was held at Kingstown on the body of Colonel William Hale, who died of a bullet wound, self-inflicted. Dr. Flinn deposed that he was called to deceased on Thursday, who was then suffering from the effects of a large overdose of chloral, 100 grains having been taken. Restoratives were applied, and next day deceased seemed to be still under the influence of chloral, and, being refused further medicine, was found twenty minutes later with a bullet embedded in the brain. The jury found that the deceased committed suicide whilst of unsound mind. The chloral was obtained, through a medical prescription, at a local chemist's.

Hospital Grants.

The Dublin Corporation have made the following grants to the undermentioned hospitals:—

	£		£
Jervis Street Hospital ..	450	Coombe Hospital	500
Mercers' „	300	Incurables' „	350
City of Dublin „	300	Hospice for Dying	450
Meath „	300	St. Mark's Hospital	150
Mater „	500	Eye and Ear „	100
Sir P. Dun's „	350	Children's „	200
Steeven's „	150	Orthopœdic „	200
Cork Street „	300		

The usual grant of 450*l.* was withheld from the Rotunda Hospitals owing to a requested alteration in their charter not having been made.

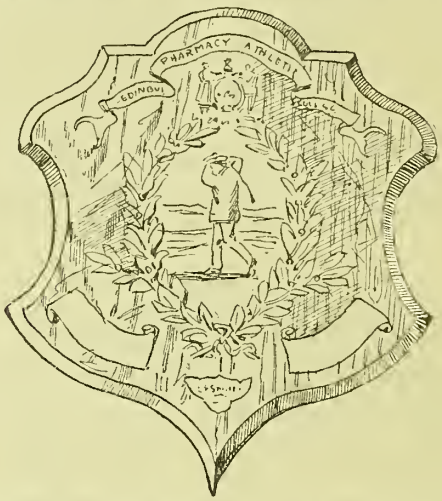
Scotch News.

Slandering a Nurse

In the Court of Session last week, an action was tried before Lord Kincairney and a jury, in which Mrs. Reid Whiteinch sued Dr. Edward Coyle, druggist, 300 Dumbarton Road, Partick, for 250*l.* damages for slander said to be contained in a statement by the defendant that the pursuer had poisoned a woman upon whom she had been called to attend in childbed. The plaintiff stated that the woman had symptoms of premature labour, and she gave her to soothe her pains half a teaspoonful of "labour tea"—ergot of rye. The defender had said that the dose was not half a teaspoonful, but half a teacupful, which would have been a highly injurious and excessive dose. The effect of the drug was to affect the woman's system with blood-poisoning, which showed itself, amongst other symptoms, by gangrene in the left arm. Both the woman and the child died. The plaintiff averred that the blood-poisoning arose from an injury to the woman's left hand, received two or three weeks before her death. She said further that information was given to the police. A *post-mortem* examination was made. It was found that the woman had not been poisoned by the drug, but had died from natural causes. Mrs. Whiteinch said that she had suffered in her feelings and business. The defendant denied damage, and said with reference to the *post-mortem* examination that it was difficult to trace excessive doses of ergot of rye in the body after death. Evidence was given at considerable length. The deceased woman's husband stated that when Dr. Coyle was called in, after examining his wife he said, "My good woman, you are poisoned." After hearing counsel, the jury gave a verdict in favour of the plaintiff on two of the issues submitted to them: (1) that on October 14, 1891, the defendant falsely and calumniously stated to Stephen Moore that the pursuer had poisoned his wife, Mrs. Agnes Moore, or used words to a like effect; and (2) that he falsely, calumniously, and maliciously, and without probable cause, stated to Archibald M'Kenzie, detective officer, Partick, that Mrs. Moore had been poisoned by a drug given to her by the pursuer, which had caused her death, or used words to that effect. Upon the first of these issues the jury assessed the damages at 25*l.*, and on the second they awarded 40*l.* The trial of the case extended over three days.

A Golf-shield.

The appended engraving represents a golf-shield in oak, with bold silver *repoussé* work, which has been presented to the golf section of the Edinburgh Pharmacy Athletic Club by Messrs. T. & H. Smith & Co., manufacturing chemists, Edinburgh and London. The centre is a figure of a golfer



driving from the tee, surrounded by a laurel wreath and surmounted by the arms of the Pharmaceutical Society. The shield will be played for quarterly by the members of the club. It was manufactured by Messrs. Brook & Son, goldsmiths to the Queen, Edinburgh.

A Dundee Lady Medical.

Miss Agnes Jane Anderson, daughter of Mr. A. B. Anderson, chemist, Dundee, has passed the first professional examination for the degree of M.B., C.M. Miss Anderson heads the ladies' list of merit, and has also carried off a valuable scholarship which has been provided by Mrs. Arthur, of Barshaw—viz., 25*l.* for three years—for the student of the first year of medicine who scores the highest number of marks in the first professional examination of the Glasgow University in October. Miss Anderson is the first Dundee lady medical.

Selling Methylated Spirit without a Licence.

At the Irvine District J.P. Court on Monday, a Kilwinning druggist was charged with having sold a quantity of methylated spirit without licence. It appeared that the Inland Revenue officer to whom the stuff had been sold had given the bottle to another officer stationed some distance off, and that the latter officer had sent it to the analyst at Somerset House. The analyst's certificate was produced. The Justices expressed a very strong opinion to the effect that a portion of the liquid alleged to be methylated spirit sold by the accused should have been left with the defendant for analysis, as was the practice under the Food and Drugs Act. Mr. W. S. N. Patrick, solicitor, Dalry, who appeared for the defendant, also objected to the acceptance of a certificate in absence of the analyst himself. The Supervisor explained that the production of the certificate only was to save costs. The case was ultimately, on the recommendation of the Bench, withdrawn.

Analysing the Analysts.

The Arbroath Agricultural Association has been testing the value of analysts' reports of cattle-feeding stuffs. Samples of the same linseed cake were sent to three analysts of good repute, and the reports showed wide differences. According to the *North British Agriculturist*, the percentages of the most important constituents of the cake were thus declared by the respective analysts:—

—	No. 1	No. 2	No. 3
Oil	12·76	11·83	15·30
Albuminous compounds	24·14	32·37	33·25
Starch, mucilage, and sugar ..	39·54	29·94	30·88

A second trial revealed results nearly as widely divergent as in the first case. The analysts may contend that different parts of a linseed cake vary in constituents; if this be so, the value of analysis as a means of estimating value is considerably discounted.

Paupers' Medicines.

At the monthly meeting of the Barony Parochial Board held in Glasgow on Tuesday, it was reported that during the past month 908 prescriptions, at an estimated cost of 60*l.* 5*s.* 6*d.*, had been dispensed at the four district dispensaries to the outdoor poor in the parish.

The Glasgow Tartaric acid Cases.

The prosecutions against three Glasgow grocers—Andrew Whitelaw, 52 Grove Street; H. & W. Wilson, 20 Titwood Place, Strathbungo; and John Black, 66 Maitland Street—for selling tartaric acid said to be adulterated with lead have been withdrawn by the sanitary authorities of the city. Black produced a warranty from the wholesale firm from whom the acid was bought, and proceedings against him were therefore dropped. A similar course was adopted in the other two cases on the ground that the percentages of lead were too minute to warrant extreme measures.

French Pharmaceutical News.

(From our Paris Correspondent.)

In Boiling Acid.—A terrible accident occurred recently at the Kuhlmann Chemical-works, near Lille. A workman was emptying a retort when, suddenly losing his balance, he fell into a vat of boiling sulphuric acid. He was pulled out almost immediately, but was terribly burned on the legs and back. He now lies at the hospital in a precarious condition.

Poison in the Hat.—The numerous cases of poisoning amongst hat-makers have induced M. Jungfleisch, the chemist, to endeavour to discover the cause. He traces it to the nitrate of mercury used in preparing rabbit-skins for manufacturing hats. He found half-a-gramme of mercury in a hat in use. Retail hatters are not exempt from the danger of poisoning by mercury in this way.

Novelty in Surgical Instruments.—At the last meeting of the Academy of Medicine M. Magitot submitted, on behalf of M. Collin, surgical-instrument maker, a series of surgical instruments which by a new mechanism are so made that the various parts are connected by a system of movable joints. This enables them to be easily taken to pieces for the purpose of cleaning, so that they can be more easily rendered thoroughly antiseptic.

Chemicals and the Paris Octroi.—As already reported in The Chemist and Druggist, Paris pharmacists are taking steps to contest the unfair application of the rules concerning city dues as regards medicaments. The Syndical Chamber of Chemical Products has now issued a lengthy memorial to the Minister of Commerce in regard to glucose, on which a Commission of the Municipal Council wishes to impose a heavy duty. The reason given for the proposed tax is that glucose is unwholesome. The Chamber points out that beetroot sugar requires more manipulating in order to arrive at purity, and that, both being necessary articles of daily consumption, glucose being the cheaper, it is of greater advantage to the larger number. Glucose has been used in Paris, says the Chamber, for forty years, and is constantly being perfected. It is declared that more than 370 tons of it are used daily in this city.

The Photography of Colours.—At the meeting of the Academy of Sciences on Monday, October 24, great attention was paid to a paper read by M. Lippmann on his researches concerning the photography of colours. The many coloured negatives shown were passed round, and appeared to convince the assembly of the valuable results obtained by the learned Sorbonne professor. M. de Freycinet, the French Minister of War, who was present, evinced great interest in the subject. The tints of these new coloured photographs are obtained on bichromate albumen or gelatine. A thin layer of the substance is spread and dried on a glass plate, and then exposed in the dark-room, backed by a film of mercury. The operations of developing and fixing are performed by simply washing with pure water; the colours then become very brilliant. The theory of the new experiment is the same as that on which M. Lippmann obtained his previous results.

The French Academy.—The unexpected death of M. Camille Rousset has caused the name of M. Berthelot, the well-known chemist and permanent secretary of the Academy of Sciences, to be brought forward as a likely candidate for one of the vacant seats in the famous French Academy. It is understood that the academicians are generally agreed as to M. Berthelot's eligibility, he being the author of a large number of scientific works, and the election of the popular chemist would undoubtedly find favour with the general public. As is generally known, the French Academy is the highest of the five academies constituting the Institute of France. The Academy of Sciences, founded in 1666, is one of the most important of the remaining four. It is divided into eleven sections, that of chemistry being one of the most important, and each section comprises six members. There are at present three vacancies in the French Academy, which is quite an unprecedented circumstance.

Administering Chloroform in Small Doses is the method advocated by M. Nicaise for the induction of anæsthesia. The danger of chloroform is thus reduced to a minimum, anæsthesia being induced without the patient suffering from agitation. The process recommended, after taking the usual precautions as to the purity of the liquid and the state of the patient's health, is that of using flannel as a mask. On this the chloroform is to be applied drop by drop. Flannel has advantages over a linen napkin principally on account of its ventilating properties. Not more than 4 drops should be given at the commencement and then the application may be continued slowly, a drop at a time, without removing the cover from the mouth, at the rate of about 12 drops a minute. In this way 10 grammes of chloroform are generally sufficient. If after the operation the patient recovers consciousness too slowly, it may be hastened by patting the cheek or fanning. M. Nicaise has not lost a single patient under his drop system.

Foreign and Colonial News.

A King to Open a Pharmacy School.—The King of Denmark will open the new National School of Pharmacy in Copenhagen, a splendid building erected and equipped at the national expense, on November 1.

Botanical Exhibition at Ghent.—A botanical exhibition, which should offer many points of interest from a pharmaceutical standpoint, will be held in Ghent (Belgium) from April 16 to 23, 1893, under the auspices of the Royal Agricultural and Botanical Society of Ghent.

Opium Imports in the States.—The quantity of opium used in the United States has largely increased during the past forty years, and the increase is out of proportion with the increase of population. In 1854 the amount imported

was about 72,000 lbs.; in 1880, 372,000 lbs.; in 1890, about 500,000 lbs.

How the Hungarian Pharmacists Swear.—When a pharmacy student in Hungary obtains his diploma of "Magister Pharmaciæ" he is compelled to take an oath, the formula of which has just been revised by the Minister of Public Worship and Education. It runs thus:—"I swear that I shall keep, and shall cause my subordinates to keep, all laws, orders, and edicts relating to sanitation and pharmacy. So help me God!"

Patent Medicines in Cape Colony.—An action was brought in the Cape Town City Magistrate's Court last month, before Mr. J. M. Crosby, R.M., by the Argus Printing Company against the African Manufacturing Company for 5*l.* 4*s.* for printing labels and for other work. The defendants paid 2*l.* 6*s.* into court, and said in defence that the terms of the contract had not been adhered to. The Magistrate found for the defendants, but expressed great astonishment that they, being unqualified, should be allowed to manufacture medicines to cure diseases. He said he should bring the case under the notice of the Attorney-General.

Wages in the French Chemical Industry.—From a report recently sent to the Foreign Office by Lord Dufferin, it appears that the average daily wages of workmen in chemical factories in France are as follows. The figures in brackets represent the average for Paris, the others for the country exclusive of the capital:—Foremen, 5 60f. (6.75f.); overlockers and markers, 4.25f. (5 40f.); men over 21, 3.45f. (4.95f.); youths from 15 to 21, 2 50f. (3 25f.); women, 1 85f. (2 45f.); boys, 1 45f. (1 35f.); girls, 1.15f. (1f.); engine-drivers and machinists, 3.95f. (5 75f.); journeymen, labourers, carters, &c., 3 20f. (4 60f.) The total number of working-days per year is 309 in Paris, and 320 in the provinces.

New Pharmaceutical Regulations in Hungary.—A new law on pharmaceutical apprenticeship has come into force in Hungary. It provides that pharmacists are not allowed to keep a greater number of apprentices than there are qualified assistants (counting the principal as one) in the shop. The period for apprenticeship is fixed by law at three years, and must be preceded by a three months' probationership. The district medical officer must visit the pharmacies in his department periodically, to satisfy himself that the apprentices are properly taught and are making satisfactory progress. Every apprenticeship indenture must be registered at the Government offices of the district, and, in case of neglect of his obligations towards his apprentices, the authorities have the right to withdraw the pharmacist's powers of keeping any.

The Ganja Monopoly in Madras.—The result of the annual sale of the privilege of vending ganja (*Cannabis indica*) in the Madras Presidency for the official year 1892–93 has resulted in a net decrease of 7,685r. when compared with the amount realised in the previous year—the total amount yielded this season by the 22 districts into which the Presidency is divided being 47,293r., against 54,978r. for 1891–92. The decrease in several districts is ascribed to the unfavourable character of the season, and to the heavy losses sustained by shopkeepers by their reckless bidding in the sales of the previous year. The total number of shops in the Presidency where ganja will be sold during the current year is 246, while the number in 1891–92 was 267. The largest number is 35 in Madras, and the smallest number 2 in Kurnool. The Madras licences realised 6,117r.

Cinchonidine v. Government Febrifuge in India.—According to the *Indian Agriculturalist* experiments have recently been made in India with regard to the relative efficacy of sulphate of cinchonidine and Government cinchona febrifuge, with the result that the manufacture of the former drug by Government quinologists is strongly recommended, in preference to the present manufacture of cinchona febrifuge. The reasons given are that it is more easily administered, while the great difference in price between 10r. or 12r. and 4r. brings it within the reach of the very poor, and would enable local boards to give it away gratuitously in very much greater quantity. It is, however, found that cinchonidine can be imported more cheaply than it can be manufactured in Darjeeling. The Government has therefore decided not to manufacture cinchonidine, but to continue the manufacture of cinchona febrifuge so long as there is a demand for it.

Austrian Pharmacy in Financial Straits.—In criticising adversely the financial position of the Austrian Pharmaceutical Society, the Berlin *Pharmaceutische Zeitung* observes:—"The remarkable predilection of pharmaceutical societies for expensive scientific and literary investigations is a peculiar feature of our times. The way in which the British Pharmaceutical Society has had a millstone round its neck with its Research Laboratory, as other societies have done with their official publications, is notorious. Nevertheless, in these societies the benevolent funds are secured by statute in such a manner that the moneys pertaining to them cannot be deviated from their proper destination. But the Austrian Society, out of a total expenditure in 1891–92 of 27,348 florins, had only spent 55 florins for the relief of necessitous members, the remainder having gone to defray current expenses. Thus the Pharmacy School, which brought in 4,410 florins, cost 5,987 florins; the establishment for the examination of alimentary substances, with a revenue of 2,354 florins, cost 3,432 florins; and the expenses for the production of the journal were 9,774 florins, against a revenue from that source of 4,822 florins." Details are then given of the present position of the Society, and the manner in which its funds have leaked away. The Food-examination Institute in particular appears to have been a veritable horse-leech's daughter. The Vienna Pharmacy Union, the municipality, and various other organisations and persons have repeatedly given contributions in aid of this luckless establishment, and in the hope to tide it over its difficulties, but all to no purpose, and now the Imperial Government is about to be beseeched to step in and preserve this pharmaceutical Uganda; for the Society, after having within four short years sunk 24,000 florins in the venture, can no longer bear the burden.

Manufacture of Alum in India.—There are some alum works at Kalabagh, on the Indus, at the western end of the salt range in the Punjab. They are owned and superintended by a native khan, who is said to be worth some two lakhs of rupees. The raw material or black alum shales, composed of silicate of alumina and iron pyrites, are brought by coolies from a spot about two miles away to the river-bank at Kalabagh, and broken up into lumps about 5 inches across. A layer of brushwood and small branches is spread on the ground, and above this are placed alternate layers of about a foot thick of broken-up shale and brushwood. The heap is made about 15 feet high and is then ignited from below. The burnt clay is thrown into square earthen vats about 10 feet long and 2 feet deep, and thoroughly mixed with water. The water containing the soluble part of the burnt shale is after a time drawn off into a similar vat, and the red suspended matter allowed to settle. It is again drawn off into a shallow circular vat about 10 feet in diameter, and made of plates of sheet iron riveted together. A furnace is built under this. The solution is then boiled with an impure sodium and potassium salt called "jamsan," obtained from "reh," the sodium sulphate and carbonate efflorescence found so commonly in the Punjab. The liquid, after boiling for some twenty-four hours, is drawn off, and is allowed to crystallise in vats of sun-dried clay. The crystals are about ½ inch in thickness, and of a light greyish-green colour. These are stacked and allowed to drain for ten days. After this they are put into earthen pots, holding about 1½ maund, with a little water, and are heated in a kiln or oven. The earthen pots are broken open when cool, and large crystals of alum some 6 inches long are found inside. This is the form in which it is sold in the bazaars. The owner of these works states that he makes some 3,000 maunds per annum, at from 3rs. to 4rs. per maund. About 3 or 4 seers of alum is the quantity obtained from each maund of black shale. The works are occasionally stopped for want of the jamsan.

Trade-marks in U.S.A.—The following were registered at Washington on September 20:—"Palatinoid," for pills, capsules, and tablets, by McKesson & Robbins, New York; "The World's Fair Pain Relief," by Joseph Williams, jun., Pittsburg, Pa; "Cough-Killer," for cough medicines, by Dr. Seth Arnold, Medical Corporation, Woonsocket, M.I.; "Saloine," for a remedy for catarrh, &c., by Robert M. Davis, Denver, Colo.; "B. D. Bailey," as signature, for seidlitz

powders, by J. F. Gibson, Providence, R.I.; "Nitro," for powder measures and rammers, by Hartley & Graham Co., Bridgeport, Conn.; figure of a phrenological head, for temperamental remedies, by John H. Patty, Chicago; "Oriental Eye Lotion," over figure of an eye, for medicated lotions and eye-waters, by Rickard J. Stericker, Springfield, Ill. The following were registered on September 27:—"11," for dyspepsia and stomach tablets, by Luyties Homœopathic Pharmacy Co., St. Louis, Mo.; "K M S," for preservative for beer, by A. Boake, Roberts & Co., London, Eng.; "Sparkling Diamond," in connection with the representations of two human faces, one of which is blotched and the other clear, for medicinal compounds, by John Lauffer, Toledo, Ohio; "Phenalgercine," for a neuralgia, &c., remedy, by H. Brinckerhoff, New York; "Alkorena," for a cure for nervous diseases and liquor habit, by Royal Medicine Company, Peru, Ind.; "Home treatment," and picture of a house, for remedy for diseases of women, by F. A. Whitney, Athena, Oreg.; "Dead Stuck," for insect and vermin exterminators, by W. Gottlieb, Philadelphia, Pa. Registered on October 4:—"Champion," for powdered lye, by Champion Chemical-works, Chicago; "Sozoderma," for soap, by W. H. Hall, New York; "Pilekone," for piles, by W. T. Strong, London, Canada; representation of a mounted knight, for sarsaparilla compound, by H. L. & J. E. Woodcock, Belfast, Me.; figure of a tooth on a shield, for a toothache-remedy, by R. Arduvini, New Orleans; "Skabcura," for sheep-dip, by F. D. Banning, Charleston, S.C.; "None-such," for fowls' medicine, by Orlando Medicine Company, Orlando, Fla.; "Antitoxine" for an antipyrectic, by George E. Dixon, St. Paul, Minn.; "Sucrol," for chemical products, by Dr. F. von Heyden Nachfolger, Radebeul, near Dresden; "The Lone Star Remedy," for medicines, by S. L. Willard, San Augustine; "Columbian," for a kidney-remedy, by J. C. Auchampaugh, Syracuse; "Persian Safety Capsules," for medicinal capsules, by H. H. Blood, Virginia City; "Preservit," for chemical preservatives, by Otto Haun & Brother, New York. There were also registered on October 11:—"Livura," for ointments, pills, and medicated soap, by the Livura Manufacturing Company, Nashville, Tenn.; "Dr. Marville's Golden Life Balsam," for a liver and skin medicine, by O. L. Mulor, Astoria, New York; and "Diabetine," for chemical products derived from sugar, by Schering & Glatz, New York.

Gazette.

PARTNERSHIPS DISSOLVED.

Arkle, W., and Arkle, J. S., under the style of W. and J. Arkle, Lancaster, chemists druggists, and paint, oil, and colour dealers.

Baker, W. R., and Pavey, H. J., under the style of Pavey & Co., Ramsgate, chemist and druggist.

Davies, H., and Jenkins, J., under the style of Davies & Jenkins Pontypridd, surgeons.

Green, H. W., and Daffarn, G. A., under the style of H. Wallace & Co., Birmingham, drysalters, &c.

Guyer, J. B., and Shapley, C., under the style of Guyer & Shapley, Torquay, chemists and druggists.

Phillips, J. E., and Worts, H. A., under the styles of Barry & Phillips and Phillips & Worts, Ealing, chemists and druggists.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

Balme, Samuel, Ravensthorpe, near Dewsbury, medical botanist.

Davies, Elias, the Royal Oak Inn, Bethesda, Carnarvonshire, chemist and druggist and ironmonger.

Parkin, George Anthony, York, previously of Halifax, chemist and druggist.

ADJUDICATIONS.

Balme, Samuel, Ravensthorpe, near Dewsbury, medical botanist.

Davies, Elias, the Royal Oak Inn, Bethesda, Carnarvonshire, chemist and druggist and ironmonger.

Parkin, George Anthony, York, previously of Halifax, chemist and druggist.

The Winter Session.

THE CHEMISTS' ASSISTANTS' ASSOCIATION.

AT the meeting on Thursday, October 20, a paper was read by Mr. E. J. Parry on "The Chemistry of the Alkaloids." The term "alkaloid," he said, was a difficult one to define. Various groups of compounds are usually included in it, but amongst scientific chemists its use is gradually becoming restricted to the substances found in plants chemically allied to pyridine. He, however, proposed to deal with the uric-acid group, the ptomaines, and the pyridine alkaloids. Amongst the ptomaines, muscarine ($C_5H_{15}NO_3$) is the most poisonous. It contains a carbon atom united to two hydroxyl groups—a very unstable combination. Neurine, a closely-allied ptomaine, contains the unsaturated and still unstable groups ($-CH=CH_2$), while choline is of stable chemical constitution. Hence, as might be expected, muscarine is more active physiologically than neurine, and neurine than choline. The leucomaines are a group occurring in healthy living tissue, but many of them are identical with ptomaines; the generic name merely denotes their origin and not a chemical difference. Amongst the uric-acid group, xanthine, caffeine, and theobromine were the most interesting. Xanthine ($C_5H_4N_4O_2$) merely differs from uric acid by 1 atom of oxygen; by replacing 2 atoms of its hydrogen by methyl groups, dimethylxanthine (theobromine) is obtained; and by replacing a third hydrogen atom by methyl, we have trimethylxanthine or caffeine. The starting-point of the true alkaloids is pyridine, which is benzene in which one CH group is replaced by nitrogen. Coniine is a very simple derivative of this body, being the propyl derivative of reduced pyridine. Nicotine is also a fairly simple derivative of the same body. The mydriatic alkaloids are more complicated. Atropine ($C_{17}H_{23}NO_3$) is isomeric with hyoscyamine, and both yield the same bodies on hydrolysis—viz., tropic acid and tropine; in fact, Ladenburg urged that they were simply optically active isomers. Hyoscine was formerly believed to be isomeric with these, but Schmidt has shown its formula to be $C_{17}H_{21}NO_4$, and identical with scopolamine. Cocaine is isomeric with hyoscine, and is the methyl ester of benzoyl-ecgonine. The cinchona alkaloids were next referred to. In both quinine and cinchonine there is a quinoline and a pyridine ring, but the complete constitution is not yet understood. Morphia, the most important of the opium alkaloids, had been well worked out by Knorr, of antipyrin fame, and had been proved to be a derivative of phenanthrene. The aconite alkaloids have been of great interest to pharmacists, and many of their members had done good work on them, especially Messrs. Ince, Passmore, Umney, Rogers, and Harrison. Professor Dunstan claimed to have partially synthetised aconitine by warming together aconine, one of its decomposition products, ethyl benzoate, and soda. The constitution of the body was not yet quite understood, but much work was still being done on it. Most of the other aconite alkaloids were being worked at, but a deal of uncertainty still prevailed about them.

DISCUSSION.

Mr. ROGERS asked if it was quite understood how antidotes to alkaloids acted. Was there a chemical combination between poison and antidote, or was it entirely physiological?

Mr. MACEWAN pointed out that Nature had made her alkaloids safe and certain in their action in most cases, whilst artificial compounds were not always so. For example, quinine was practically non-poisonous and certain in its action, whereas such bodies as antipyrin often produced unexpected results. It was noteworthy that Ladenburg had been unable to produce artificially-prepared atropine absolutely identical with the natural, except by means of a culture of *Penicillium glaucum*. This raised the question as to how far the intervention of life played a part in the stability of such bases, and whether it would be possible without life to synthetise alkaloids.

Mr. S. A. WALTON pointed out that the tests for alkaloids were by no means as certain as those for other bodies, and it would be of advantage to discover better ones.

Mr. E. F. HARRISON said that the relation of chemical

constitution to physiological action had been well shown in the case of the sulphonals. Both Schmidt and Hesse had certainly proved Ladenburg wrong in his deductions on hyoscine and scopolamine, which were probably identical.

Mr. PARRY, in reply, said he thought the action of antidotes was purely physiological. The tests for many of the alkaloids were, of course, somewhat uncertain, but a good number of them could be recognised with perfect certainty. Ladenburg's separation of inactive atropine into its optically-active isomers opened up a new question as to the theories of optical activity which was too long to discuss in his paper.

BRIGHTON JUNIOR ASSOCIATION OF PHARMACY.

THE third annual dinner of this association took place on October 19 at the Café Royal, Brighton. The President (Mr. A. E. Colman) was in the chair, and the company numbered about forty, including Messrs. J. R. Gwatkin, Marshall Leigh, W. W. Savage, Shepherd, Shelvey, Smithson, Histed, &c.

Among the speeches was a toast to "The Pharmaceutical Society of Great Britain," submitted by Mr. YATES and replied to by Mr. MARSHALL LEIGH, who said that the Society had made great headway during the last five years The Pharmaceutical Society and its buildings were very different to what they were a few years ago. When he visited the rooms some eighteen years ago they were anything but satisfactory, but now they had a splendid examination-room, together with appliances, of which any pharmacist might be proud. The Society had done a great deal to benefit the trade. They were compelling unqualified persons to discontinue the sale of patent medicines which contained poisons. Since the decision in the chlorodyne case given by the chief magistrate in London, the Society had secured penalties from a large number of grocers having a number of branches. On being approached, they elected to pay the fine and discontinue the sale. They were also about to proceed against some eighty or ninety unregistered persons, and in that way they were doing good to the trade. Mr. Leigh also referred at length to the work of the Benevolent Fund.

Mr. STANLEY SMITH, in giving "The Senior Association of Pharmacy," urged that body to take a more active part in movements affecting chemists. He especially suggested early closing as a suitable field for their energies Mr. W. W. SAVAGE, in responding, said the Senior Association had already borne the burden and heat of the day, and looked to the junior members to take their places. He also alluded to the benefits now enjoyed by assistants compared with those working some thirty years ago. On behalf of his father, who, Mr. Savage said, had attained his 84th year, he offered a Remington's "Pharmacy" for the best herbarium next year, adding that no doubt others would be glad to offer second and third prizes.

Mr. GWATKIN proposed "The Junior Association," for which Mr. COLMAN (President) and Mr. NOSWORTHY (Hon. Secretary) replied.

LEEDS CHEMISTS' ASSOCIATION.

THE annual general meeting of the above Association was held in the library on Thursday, October 20, Mr. E. Yewdall (Vice-President) in the chair. Mr. F. W. BRANSON (Hon. Secretary) read the "Twenty-fourth Annual Report." The Council recorded with pleasure that, through the liberality of the Council of the Pharmaceutical Society, a grant of 20*l* had been received in support of the educational work of the Association. As a result, arrangements had been made with Mr. W. West, F.L.S., of Bradford, who last winter delivered a course of twelve lectures on materia medica, with practical instruction in microscopy. The attendance was much smaller than the Council had hoped. The grant had also enabled the Council to purchase a cabinet for the collection of materia medica. The library was said to be in good order, and the books are now in the custody of the librarian of the Church Institute, who will issue them to members and associates on application. The Association's room is at all times open, and gives facilities for using with comfort the books and periodicals. A catalogue of the library has recently been issued. Ten new members and fourteen new associates had been elected during the year. The Council added, "There never was a time when the interpretation of the Pharmacy Act had greater practical interest for those engaged in pharmacy. Recent decisions on the question of proprietary medicines containing legal poisons, their labelling, and who may legally vend them, have great interest. The Pharmaceutical Society has shown a laudable disposition towards actively supporting the principles of the Pharmacy Act by claiming that the duties which that Act sought to regulate can only be exercised by the qualified class which it created. Local associations must feel it to be a duty to maintain their organisation, and thus be ready to give support to these principles."

Mr. S. TAYLOR (Hon. Treasurer) presented his financial statement, and this and the annual report were adopted.

After several votes of thanks had been passed, a discussion took place as to the desirability of arranging a social meeting at an early date, and it was decided to leave the matter in the hands of the new Council.

The officers for the coming year were unanimously elected as follows:—President, Mr. R Reynolds, F.I.C.; Vice-President, Mr. E. Yewdall, Ph.C.; Hon. Treasurer, Mr. S. Taylor; Hon. Secretary, Mr W. D. Pollitt; Council, Messrs. F. W. Branson, F.I.C., G Bridges, C. G. Catterall, P. Jefferson, Ph.C., G. Ward, F.C.S., and G. W. Worfolk; Auditor, Mr. E. Brown, Ph.C.

DUNDEE CHEMISTS' ASSISTANTS' ASSOCIATION.

THE first of the ordinary meetings was held on Thursday last week, when the President's address was delivered by Mr. James A. Kinnear. He took the well-worn text of unity and co-operation among the members, and gave some sound advice. He also referred to the art of social intercourse which he also regarded as essential to the life of the Association. He briefly reviewed the work to be done during the fourth session, and referred to the recent interpretation of the Poisons Schedule. Mr. Kinnear was heartily thanked for his address on the motion of the Honorary President, Mr. Charles Kerr, who presided.

"POISONS AND THEIR DETECTION" is the subject of the paper to be read before the next meeting of the Manchester Pharmaceutical Association, on November 9, by Mr. Charles Turner, of the Manchester College of Pharmacy.

DEED OF ARRANGEMENT.

The following deed of arrangement with creditors has been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1867. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act making any of these arrangements binding upon dissenting creditors.

Tyrer, Joseph, 33 Tithebarn Street, and 50 Landseer Road, Everton Liverpool, chemist. Dated, October 21: filed, October 22. Unsecured liabilities, 707*l.* 15*s.* 1*d.* Composition of 2*s.* 6*d.* in the pound, payable forthwith. Release, &c. The following are scheduled as creditors:—

	£	s.	d.
Anderson, C. L., Liverpool	31	0	0
Jackson, Henry, & Sons, Liverpool	26	13	4
Pollard, F. W., Liverpool	26	0	0
Reliance Advance Company, Liverpool	40	0	0
Southall Bros. & Barclay, Birmingham	25	2	3
Stern, J., Liverpool	40	0	0
Sumner, R., & Co., Liverpool	80	0	0
Thompson, John, Liverpool	423	15	8

SPONGE-BLEACHING.—After sponges are bleached with permanganate they are very sickly-looking, which objectionable appearance is overcome by dipping them into a solution of helianthin.

THE BREWERS' EXHIBITION.

THE fourteenth annual exhibition and market of what we may for shortness call the beverage-trades was opened at the Agricultural Hall, Islington, on Monday. It is a very big affair this year, and the variety of exhibits is a little astounding. One reporter has said that "more than 600 firms are represented, and employment is given at the Hall to upwards of 3,000 persons. Such has been the demand for stall-space that some 200 intending exhibitors have had to be disappointed." Our own reporter did the show earlier in the day, perhaps, than the one who wrote that, and he could only get the number of exhibitors to 300 with a stretch. And as for the 3,000 persons employed at the Exhibition—well, that's another. Strictly speaking, the Exhibition part of the show is subsidiary, or is made subsidiary, to business. First and foremost it is a market, for hither there come from all parts of the country aërated-water makers and chemists (not to mention the brewers and spirit-sellers, with whom we have no concern); they see the representatives of firms with whom they do business; they have a chat, a cigar, maybe a drop of "Scotch" too, and then they come to business. On such occasions it is appropriate that novelties should be introduced. The soul of man delighteth in all that is new, and it is a harmless fancy to humour, for it leads to business. It is not surprising, then, that the path to success lies thick with the ruins of novelties. What does the poet say? But never mind the poet. Here is a poem which Mr. Howell, of STEVENSON & HOWELL, served up—a "golden cider," which tastes fruity and is very refreshing. This, our reporter ascertained, contains no synthetic ethers. Nature only has been at the making of the essence, and the result is what might be expected. Then there was another good thing on all fours with it—"Sparkling Mocha." Here we have the true flavour of coffee, and all its stimulating properties, in an aërated beverage. From that we go to rum—"Not much in your line," was the remark; "still here is a rum-colonring, made from sugar, which mixes clear with 66 o.p spirit." Then the two branched off into a talk about lead in tartaric acid, which is a matter that is exciting considerable disturbance in the aërated-water trade just now, and Mr. Howell complains of the looseness of the B.P. test for lead. He thinks the statement that "an aqueous solution of the acid is not affected by sulphuretted hydrogen" is much too vague; for a solution of an acid undoubtedly containing lead may be made which will not be precipitated by sulphuretted hydrogen. Moreover, it is the very vagueness of the Pharmacopœia which is responsible for the continuance of much plumbiferous tartaric acid in the market, and there is need for greater precision on the point. Will Professor Attfield make a note of this? Granted that the infinitesimal trace of lead in an acid which passes the B.P. test reasonably applied can do no harm to a human being, still there remains the fact that analysts detect it and show it up as black as the sulphide itself. There the shoe pinches.

Following the catalogue, we next touch MESSRS. W. J. BUSH & CO.'S exhibit, with which are associated the manufactures of W. J. Bush, Faye & Co., of Messina. This is placed in a larger booth than that which the firm had last year, and it is a facsimilied reproduction of a portion of the Messina factory. The firm were well prepared for their provincial customers, the principals being there with Mr. J. J. Woolley and fifteen travellers. That conveys, as well as anything could, the importance of this Exhibition to the trade, and, said Mr. Woolley, "I have been here now for fourteen years. Whatever part of the country I may be in, I come on here, and every year we have got bigger and bigger." The firm had all their best-known soluble essences on show. They are just placing on the market two concentrated oils made by themselves, lemon and orange, 1 part of which represents 25 of the natural oils.

DAN RYLANDS (LIMITED), Barnsley, showed two new sets of aërating and bottling plant for the first time. These were adapted to the use of liquefied carbonic-acid gas. During the past year the company have started the production of compressed carbonic-acid gas at their Barnsley Works, by new processes which they have patented, and which exclude the use of mineral acids. Mr. McEwen, their consulting engineer, has invented a machine for using the gas produced. This machine is very compact, and is well adapted for those who have little room to spare (3 feet square serves to hold it) and who wish to work with little mess. The company also showed the "Rapid Paragon" turnover filler for use with power. Over 4,000 of the hand-fillers have been sold, and Mr. McEwen told our reporter that a youth at Stockton-on-Tees managed to fill by hand-power with this machine 150 dozen bottles in one hour. This machine, we find, is also now made for working by steam-power. A good show of glassware added to the attractiveness of the company's stand. They are developing this branch rapidly, and are producing many varieties of glassware in addition to syphons and soda-water bottles. The Standard Essence Company's manufactures were also exhibited.

MR. WILLIAM HAY, of Hull, a pioneer in the soluble-essence industry, had a good assortment of his products at the west end of the hall. Close to him were MESSRS. LE GRAND & SUTCLIFF, hydraulic engineers.

Amongst the things which were to be seen at MR. J. J. HICKS'S stand was an ingenious cask-filling gauge. This resembles a syphon, the top being N-shaped. The second limb of the N is widened out much beyond the diameter of the rest of the apparatus to form an air-chamber, and the third limb is also widened and graduated. Into the latter water is poured down to zero, and the apparatus placed in the cask. As the cask is filled the liquor goes into the tube and forces up the water in the top part, whereby an indication is obtain of the volume of liquor in the cask. As a rule, Mr. Hicks's exhibits consist mainly of thermometers, hydrometers, and the like. In the former section he showed several novelties, including a mashing thermometer, in a strong wood carrier, which comes out much cheaper than those made of brass. In these the bulbs are replaceable, all being made to a common standard. Another novelty is Fuller's cleanable tap, in which the bore is equal throughout, so that it can be cleaned without removing the plug.

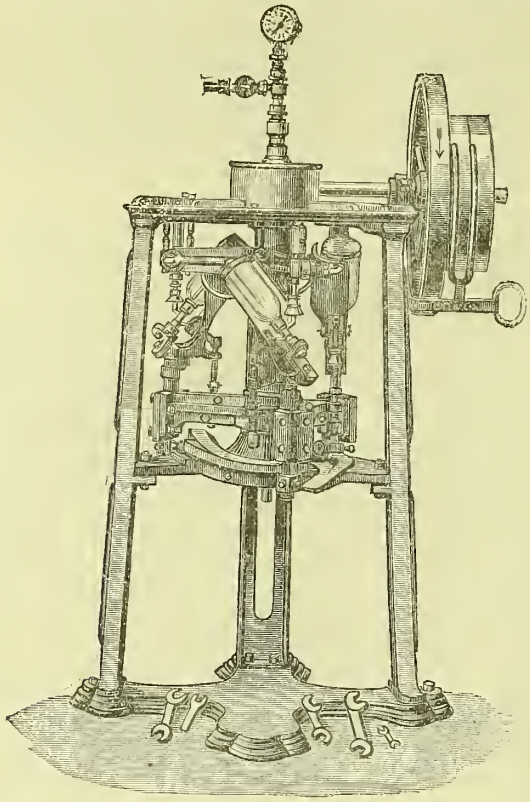
BRATBY & HINCHLIFFE (LIMITED) managed both by their position and the attractiveness of their apparatus to keep a goodly company of critical and appreciative visitors round their stand. The centre of attraction here was, undoubtedly, Chavasse's turnover filling-machines, which work with human-like regularity, and fill 150 to 200 dozen bottles per hour.

MESSRS. W. MEADOWCROFT & SON claim to have the largest bottling-machine on show which has ever been produced. It has 4-inch pumps, with a 12-inch stroke, and can keep ten steam fillers working—that is, produces as much water as will keep fifty horses on the road. The machine is essentially a saturator, so arranged that if it is not used to its full power there is no waste. This is secured by the adaptation to it of a new self-indicating valve, which is actuated by a ball and weight. Whenever the water reaches a certain level in the saturator the ball is filled and drops, cutting off the supply. It is a matter of experience that saturators should never contain more than half their volume of water, otherwise the aërated product is not so brisk. This valve-arrangement of Mr. Meadowcroft's ensures this in spite of careless men. The size of this machine threw the remainder of the exhibit somewhat in the shade, but the firm still continue essence-manufacture.

MESSRS. C. H. GLOVER & CO. were showing their steel-wire bound boxes. They are manufacturers of druggists' wood boxes as well as those for beverages, but the latter sufficed for the Exhibition. These, we may say, after being dovetailed and nailed, have a strong steel wire fitted into a groove round the joints, the result being a box of great strength and durability. Bottle-washing trays and trollies are made by the firm on the same principle.

There were two novelties in MESSRS. BARNETT & FOSTER'S stand to which we should like to call attention owing to their ingenious nature. One was an improvement upon the "Excelsior" turnover filling-machine for stoppered bottles. This has attached to it a syrup-pump with a glass bucket. The capacity of this bucket is altered by moving a small lever, the effect of this being to increase or diminish the quantity of syrup as desired—indeed, it can be reduced to *nil*. It is impossible to see the "Eclipse" syphon-filler in action without admiring the mechanism. It carries three syphons on a slowly-revolving table, and it is in watching the various parts come into play that the interest attaches. When an arm reaches the left-hand standard we a see a tiny

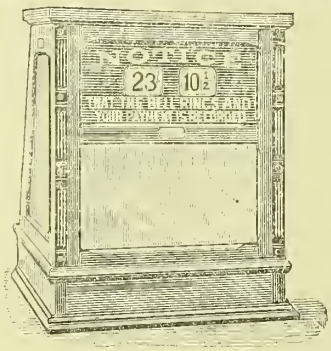
rod rise from the syphon-lever, the syphon is closed, the connection with the reservoir cut off, and we may remove the syphon and put another in its place. Then we see the little rod come into play again, and by the time the arm



gets round to the right-hand stand the syphon has been opened and is being filled. All this was noted, and twelve seconds was found to be the time taken. The machine works with great regularity.

Amongst other firms who exhibited on the ground floor we noticed the following: MESSRS. HASSALL & CO., phosphocitric acid. Messrs. Hassall, it may not be generally known, are also manufacturers of pure phosphoric acid (syrupy) for medicinal purposes MESSRS. HERTZ & COLLINGWOOD, Roshach water; DURAFORT ET FILS, a fine show of syphons and seltzogenes, with porcelain-lined metal parts; THE SILICATED CARBON FILTER CO.; BRAND & CO., beef-preparations; BOVRIL (LIMITED); F. KING & CO. (LIMITED), desiccated soup; JOHN SYMONS & CO., cyder; THE JOHANNIS CO. (LIMITED); and LOFT'S PATENT CHECK TILL CO.

THE CASH REGISTER COMPANY, of Manchester, explained to our representative the action of their "International"



check-till. The distinctive feature of this is the dial arrangement (very like that of a gas-meter) for making the record of the sale. When opening the till one hand is used to move the index-levers, whereby the amount of the purchase is brought into the view of the customer and recorded by the dials, and the other hand releases the drawer. It is all very simple in action, and is worth looking into by those who require a handsome till and secure check. Our illustration is of the front of the till, which is quite attractive.

R. W. ANDREWS & CO., makers of filtering apparatus, called our reporter's attention to an "atmospheric yeast-press and beer-filter," which they thought would be useful to manufacturing chemists for quick filtration and collection of precipitates. The filter is a large oblong trough with a false bottom of wire netting fixed in a wood frame. This, after being luted down, has filtering-cloths spread over it, the fluid is put in, and then steam is allowed to pass through the exhaust-pipe. A vacuum is thus created, and filtration goes on rapidly. Of course the surface is large and level.

THE GALLERIES.

The exhibits in the galleries were of the "catering" class, but there also many firms were glad to take space who could not get it below. Here, for example, was MR. WM. GARDNER, with a good selection of sifters and mixers. As some people want sifters, and others mixers, Mr. Gardner now makes these as well as the combined machines. Of the latter the newest thing is the "centrifugal dressing-machine," a sifter which will sift up to, say, No. 200 powder, but simultaneously the machine may divide a mixture into as many as four grades of powder, that being merely a question of sifting-cloths. The work is done by one or more worms, which are revolved with great rapidity inside the cylindrical sieves. The whole works without producing dust.

THE CATLEY ABBEY NATURAL SELTZER COMPANY, of Metherington, have, it appears, secured a firm hold with their water, which is increasing in popularity.

MESSRS. S. CLARK & CO. had a very cosy-looking exhibit of their gas and oil heating-stoves, which many chemists are familiar with as the "Syphon." Beside them were JAMES BOULTON & CO. (LIMITED), the makers of "Semper dulcis" and other chemical manufactures. THE BIRKEFELD FILTER COMPANY and THE GLASS-LINED SYPHON COMPANY (LIMITED) were together at, on the whole, an attractive spot and the representatives of each had ample opportunity for describing their company's products. For the first time we notice JOHNSEN & JÖRGENSEN at the exhibition, with some very good samples of s.w. bottles, spirit-flasks, &c. F. KENDALL & CO., of Stratford-on-Avon, also exhibited in the gallery a series of brown colourings, which are claimed to be non-fermentable owing to the fact that they are not made from fermentable sugars. THE NATIONAL CASH-REGISTER COMPANY had their old position in the galleries for a splendid exhibit of their tills.

COMPETITION.

The ginger-ale and non-excisable fermented beverages competition was decided on Tuesday. This was for two silver and two bronze medals, and three certificates. Each competitor (there were about 120) had to submit six bottles of one or of each beverage to the judges, who were Messrs. W. Brathy, J.P., James Johnson, and J. T. Norman, F.C.S. The results were, in the ginger-ale competition: F. C. Batchelor, Alresford, Hants (silver medal); R. D. Green, Brightlington, Yorks (bronze medal); Cater, Hoffell & Forth (very highly commended); G. Hirst, Liversedge (highly commended); and the Tadcaster Towers Brewery Company, York (commended). For non-intoxicating fermented beverages the awards were: E. Lyon, Prescot (silver medal); D. Clifton, Stockport (bronze medal).

In accordance with their custom, Messrs. Hayward Tyler & Co. had a small exhibition of their own at their works in Upper Whitecross Street, E.C. Amongst the novelties which the firm displayed were a 185-gallon cylinder and the "AA1" machine. The latter has been introduced as a powerful machine, specially suited for filling syphons. It is furnished with a 2½-inch pump and a 12 gallon copper cylinder fitted with two draw-off cocks. Great strength and durability are the main features claimed for it. The output upon a ten-hours' working-day is calculated at 1,500 dozen of sweet drinks in patent bottles, 800 dozen of 10-oz. bottles of highly aërated soda water, 200 dozen of large syphons, and 400 dozen of pint syphons. The firm also exhibited a number of their well-known steam and hand bottling-machines.

MAJOR EXAMINATION.

Questions set by the Board of Examiners for England and Wales to October candidates, to which are appended model answers.

MATERIA MEDICA.

(Time allowed: Three hours)

Question 1. *Give an account of the aloes of commerce and their physical characteristics.*

Answer. The aloes of commerce are derived from various species of *Aloe*, N.O. *Liliaceæ*. Four well-marked varieties occur, as well as subordinate modifications of each.

1. Barbadoes Aloes (from *Aloe vulgaris*): This is imported in gourds or boxes. It is hard and dry, and varies in colour from liver to almost black; its odour is disagreeable, and it has a dull, waxy fracture. When powdered it is olive-yellow. A thin layer moistened with spirit exhibits numerous crystals when examined microscopically. A somewhat more translucent variety with a distinctive odour is called Curaçoa aloes.

2. Socotrine Aloes (from *Aloe Perryi*): When freshly imported it is softer than the preceding kind, and it has a much less disagreeable odour. Its colour is reddish-brown, and its fracture is either smooth and resinous or, less commonly, rough and irregular. The powder is tawny reddish-brown. Crystals are visible in it when treated as already described. Hepatic Socotrine aloes resembles the above save that it is liver-coloured; its commercial value is somewhat less.

3. Cape Aloes (from *A. ferox* and *A. spicata*): This kind has a brilliant conchoidal fracture. Its colour is dark in mass, amber in small fragments, and tawny-yellow in powder. Its odour is aloetic with a certain added sourness. Crystals are not seen in it, and its commercial value is much less than that of the Barbadoes and Socotrine.

4. Natal Aloes is generally greyish-brown and opaque. Its odour is different from that of Cape aloes, from which it is further distinguished by showing crystals in the same way that Barbadoes and Socotrine do.

Question 2. *Examine by the microscope the samples of linseed meal, 1, 2, 3, and state if any admixture.*

Question 3. *What are the adulterations of white and yellow wax, and how would they be detected?*

Answer. Wax has been adulterated with many substances, such as earth-wax, ordinary hard paraffin, Japan wax, suet and other fats, resin, soap, flour and other starchy bodies, and insoluble matters such as kaolin and bone-ash. Turmeric is also used to give a good colour to inferior yellow wax. In examining a sample it must first be remembered that adulterations will probably affect the melting-point and the specific gravity, hence both of these should be determined. If wax be boiled with water, the cooled filtrate will give a blue colour with iodine if starchy matters be present, and a separation of fatty acid will be produced by adding a mineral acid to the filtrate if there be soap in the sample. Cold rectified spirit dissolves only 3 per cent. of pure wax; a larger solubility would probably indicate adulteration with resin. Hot turpentine entirely dissolves wax, but would leave kaolin, bone-ash, &c., undissolved. Boiling solution of soda ought to have no action, but would produce a brown colour with turmeric, and would dissolve out Japan wax, suet, fatty acids, &c., the filtrate in this case becoming turbid with acid. hydrochlor. dil. If the wax be destroyed by hot sulphuric acid, paraffin and earth-wax will be left, they being but little affected by this reagent.

Question 4. *Describe the structure of a transverse section of a root of aconite and horseradish.*

Answer. A transverse section of aconite-root exhibits a white central axis of an irregular shape, possessing about seven rays, and having a thin fibro-vascular bundle at each projecting angle. Horseradish-root in transverse section shows a large central column, with its tissues arranged in a radiate and concentric manner, and separated from the firmly adherent cortex by a small greyish circle.

Question 5. *Give a description of manna, and how obtained.*

Answer. Manna is derived from the *Fraxinus Ornus*, N.O. *Oleaceæ*. It occurs in pale-coloured stalactitic pieces, has a sweet taste, and is soluble in about six parts of water. It should contain nearly 80 per cent. of mannite [$C_6H_8(OH)_6$]. The other constituents are, besides indefinite matter, a sugar possessing considerable reducing-power, a little mucilage, a still smaller quantity of an offensively-smelling resin, and a glucoside called fraxin, which confers upon a solution of manna the property of fluorescence. It is obtained from trees cultivated in Sicily, by making cuts in the bark about 2 inches long, and just deep enough to reach the wood. The manna exudes from these notches and is allowed to partially harden upon the tree. It is then pulled off, laid upon boards, and exposed to the air till it becomes dry enough to admit of packing.

BOTANY.

(Time allowed: Three hours.)

Question 1. *Draw a diagram of the natural order* Gentianaceæ, *and name some of the indigenous plants in the order.*

[*Note*—Instructions for drawing floral diagrams are to be found in Prantl and Vine's (page 196), and by their aid it will be easy for the student to construct the diagram of the *Gentianaceæ* from the characters of the order. The indigenous plants are *Chlora perfoliata*, *Microcala filiformis*, *Erythræa Centaurium*, *Gentiana* (six species), *Menyanthes trifoliata*, and *Limnanthemum peltatum*. ED. *C & D.*]

Question 2 *What are diatoms and desmids, and state how are they increased, and how do they differ.*

Answer. Diatoms and desmids are unicellular algæ belonging to the order *Conjugatæ*. Sexual reproduction takes place in this order by means of conjugation—*i.e.*, the union of the whole protoplasmic contents of two cells to form a zygospore. Asexual reproduction occurs by the division of the individual into halves. The difference between the two groups may be thus summarised: The diatoms are found both in salt and fresh water, they contain a dark-yellow form of chlorophyll, and are provided with a cell-wall or frustule loaded with silica. This cell-wall is composed of two halves, and is often extremely beautiful. Desmids are green in colour, occur only in fresh water, and have not a silicious envelope.

Question 3. *How are starch, gum, and sugar formed in plants?*

Answer. (*a*) Starch is formed in the chlorophyll granules under the influence of light, possibly as a result of the polymerisation of formic aldehyde with elimination of water. From the chlorophyll it is removed in a soluble form either for immediate consumption in the growth of the plant or, more commonly, to be redeposited as starch granules and stored up for future use. (*b*) Sugar is formed either from previously prepared starch, or *de novo* in the chlorophyll granules. (*c*) Gum is called a degradation product, and appears to arise from the alteration of cellulose.

Question 4. *What are assimilation and metastysis* [sic], *and in what parts of plants do they take place?*

Answer. The term assimilation is ordinarily applied to that formation of organic matter from inorganic carbon dioxide and water which takes place in the chlorophyll granules under the influence of light. This may occur in any green part of the plant but, in most cases, the leaves are the chief seat of the process. Assimilation is accompanied by elimination of oxygen, and tends to increase the weight of the plant. Metastasis is the name given to the chemical metamorphoses which the products of assimilation subsequently undergo, whether such metamorphoses occur in the chlorophyll cells themselves or take place after the removal of the assimilated material to other parts of the plant. Metastasis is not confined to any special organs, but may be carried on in any part of the plant, and equally well in darkness as in light; it is accompanied by the absorption instead of the elimination of oxygen, and does not tend to increase the dry weight of the plant, but rather to diminish it.

Question 5. *State the sources of the food of plants, and by what means is it taken up by them?*

Answer The two sources of the food of plants are (*a*) the air, (*b*) the soil or other medium in which they grow. The air enters the leaf by means of the stomata, and fills up the whole intercellular system of the leaf just as it fills the lungs of an animal. From this air the carbon dioxide is taken and suffers decomposition, its carbon being retained and its oxygen exhaled. Except in the case of parasitic plants and

saprophytes, it wonld appear that the whole of the carbon which enters so largely into the composition of the plant is obtained in this way.

From the soil the plant absorbs, by means of its root-hairs, water and the substances dissolved in it. The acid sap contained in the cells, and which saturates their walls, exercises a solvent action on constituents of the soil which would otherwise be insolnble, and thns the absorption of these constituents is brought abont. It is from the soil that the plant obtains its hydrogen, oxygen, and nitrogen, as well as its supply of the elements commonly called inorganic.

Question 6. *Describe the fruits marked* 1, 2, 3, 4, 5, 6.

Pharmaceutical Society of Ireland.

PHARMACEUTICAL LICENCE EXAMINATION.

October, 1892.

PHARMACEUTICAL CHEMISTRY.

Dr. Ninian Falkiner.

1. What are the impurities of syr. phosph. ferri,' potassinm iodide, and calomel—how are they detected ?
2. How can an acetate, a chlorate, and a nitrate be distinguished by chemical tests ?
3. What is an alum ? Give the formulæ for the official alums.
4. How is ethyl ether prepared ? Give formu'æ.
5. How does HNO_3 act upon the following :—
Ag., Cu., Fe., Zn., Pt., $C_6H_{10}O_5$, C_2H_5OH., $C_3H_5(OH)_3$.

GENERAL CHEMISTRY.

1. State the principle of Avogadro, and show how it is applied to finding the atomic weights of the elements ?
2. What change takes place in the vol. of 1,000 ccs. of O. at zero if the temperature rises through 20° C.
3. Define the terms—
Rational formula ; empirical formula ; graphic formula ; hydrocarbon ; alcohol ; ether.
4. What is a salt ? Give a classification of " salts."
5. What are the chemical analogies of the Halogens ?

PRACTICAL CHEMISTRY.

Dr. Ninian Falkiner.

1. Box contains a salt.
2. Box contains a metal.
3. Box contains an organic substance.
4. Bottle contains a solution of H_2SO_4 ; calculate the weight of H_2SO_4 in each fluid onnce.

MATERIA MEDICA AND BOTANY.

R. J. Montgomery, M.A., F.R.C.S.

[*Three of the materia medica, two of the botany questions to be answered.*]

1. " A powder which consists of the minute glands and hairs obtained from the surface of the fruits of *Mallotus philippinensis.*" Name the drug, and give characters, test, and dose.
2. Name and give the characters, tests, doses, and preparations of the official hydrochlorates of the alkaloids.
3. " Confectio aromatica." Name and describe the seeds contained in this preparation.
4. Podophyllum rhizome. Source, characters, and preparation, with dose.
5. Borax.—Synonyms, definition, characters, tests, and preparations.

1. Write out a full botanical description of *Rosa canina.*
2. Give the general character of the Spurge family, and mention the B P. representatives.
3. Explain the following botanical terms which occur in the B P. :—Raceme, mericarp, vittae, capitula, rhizome, epicarp, dissepiments, stocks, stools, corm, panicles, napiform, fusiform.

PRACTICAL PHARMACY.

Mr. T. W. Robinson.

1. Enumerate the dilnte acids of the B.P., giving strength and dose of each.
2. What is nux vomica ? State accurately how each official preparation of it is made.
3. Describe the mode of preparing—
(*a*) Unguentnm cantharidis ; (*b*) nnguentum cetacei ; and (*c*) unguentnm hydrargyri nitratis.
4. Mention the official hypodermic injections, and state how the injection of morphia is made.
5. Supply the official synonyms for the following :—
Eserine, guaranina, ext. elaterii, myristicæ adeps, hepar sulphuris, liq. sarsæ.

MODERN PHARMACEUTICAL JOURNALISM.

In the New York *Druggists' Circular*, Mr. George J. Seabury reflecteth as follows :—

I have hesitated to express my opinion on the relative merits of advertising in pharmaceutical jonrnals by drawing a comparison between those that have a *bonâ-fide* paid up snbscription-list and send out a limited number of sample copies, and journals that have a small subscription-list and a very large sample-copy circnlation, for the simple reason that nearly all of the pharmaceutical journals throughout the United States have, at various times, received support from onr honse.

In the front rank of modern pharmaceutical journalism we must place all long-established journals that have had for many years a paid working staff, and that have a local habitation and name. Such journals favour their subscribers with original editorials and contribntions of a scientific, educational, and commercial nature, together with abstracts from foreign sources of valne to their readers, and contain, in addition to all these necessary featnres, a variety of practical information.

The most valnable mediums to the advertiser in this class of journals are unquestionably those that have the largest number of snbscribers. Even if we had in the United States a dozen pharmaceutical journals that could be classed as legitimate enterprises, or as the inanimate spokesmen of some of onr colleges of pharmacy, the fact remains that each one of these would have a valce, and that valne shonld be determined on an actual paying circulation. Paying subscribers, as a rule, carefully read their journa's.

As to sample copies, so far as I am concerned, I simply glance over the matter contained therein and pay no attention whatever to the advertising columns, for reasons which I need not explain. There are several very excellent pharmaceutical journals in this country. There are also a great many semi-pharmaceutical journals, whose existence is perpetuated through the glib and dishonest assurances of some romancing solicitor of advertisements, and whose representatives always tell the truth (?) as to the circulation of their journals. The advertiser usnally receives for his investment nothing beyond a sample copy to show that his advertisement was printed in the jonrnal by some enterprising printer.

Now a few words for the gay and festive house journal. These publications owe their existence to the survival of the rebate plan and a desire to issue a catalogue at someone else's expense. In the intense strife of modern competition between wholesale drnggists throughout this country, mannfacturers and owners of specialities are generally applied to " to pay the freight " on the pnblication. When successful, the solicitor for such journal gloats over the fact that " he has just corralled the Smith & Jones Pharmaceutical Co.'s advertisement for $200 per annum." In looking over their bnsiness transactions with the Smith & Jones Co. they find a record of purchases for the past year to the amount of $400. Gently placing his index finger on his commercial

nose, he addresses his partner thus: "Seest thou? We've got 'em again. We have purchased a year's supply of their goods at 50 cents on the dollar."

The expert advertiser draws his own conclusions as to the value of such mediums. There is a small percentage of house journals that are valuable to advertisers and which are also welcomed by their customers, but there is a long line of them, like hundreds of medical journals, that are issued solely with a view to individual profit, which, in my judgment, are practically worthless, and published only for tribute and business for an enterprising publisher or printer. Alluding to this latter class of journals, it is not a pleasing thought for the well-established manufacturer to be quietly informed that if an advertisement for his commercial journal is not forthcoming, his goods will be discriminated against by the substitution of other makes for his. Such threats often come from apparently respectable houses, and advertisements solicited on such a basis represent pure and simple blackmail; no self-respecting concern will submit to such a contemptible "stand and deliver" transaction.

My advice to advertisers is to advertise in pharmaceutical journals of known circulation. In the selection of them, use your best judgment as to their value as a circulating medium. If they will show you their list of paying subscribers and their books with cash receipts from subscribers for several years back, then you have a foundation to operate upon. If I were to advise in which journal, pharmaceutical, medical or commercial, you ought to advertise, and gave you that advice honestly, I should probably be the most unpopular man in the United States among publishers. Moreover, I do not propose to offer gratuitously in a public letter twenty years' experience of what I know about advertising. Should a request be made of me to furnish such information, the price will come quite high; but, for all that, it will be mighty cheap.

Legal Reports.

Infringement of the Factory Acts.

At the Nottingham Police Court, on October 21, Messrs. Newball & Mason, manufacturing chemists, Hyson Green, were summoned at the instance of Captain Bevan, Inspector of Factories, for having failed to securely fence a horizontal shaft on their premises, by which a youth named George Edwin Clarke was killed. The accident has been already reported in this journal. There was a long table in front of the shafting, but the solicitor who appeared for the defendants admitted that this was not sufficient to fulfil the requirements of the Act. After evidence had been given of the accident, George Edwin Clarke, the father of the deceased boy, stated that the defendants had paid the funeral expenses, and had promised him something else. Mr. Green, the defendants' solicitor, said no sum had been mentioned. He had taken the responsibility of advising the defendants to wait until those proceedings were over. Witness said the defendants had behaved well to him over the matter. Mr. Green explained the precautions that had been taken, and urged that the penalty should not be of such an amount as would lead the outside world to think his clients were guilty of any really very culpable negligence in the matter. He called evidence, and in reply to the Magistrates said he would undertake to advise his clients, and there was no doubt the boy's father would get what he was entitled to under the Employers' Liability Act, in addition to whatever penalty was imposed. A penalty of 25*l.* and costs was thereupon imposed, and the Magistrates expressed the hope that the Home Secretary would pay this money to the lad's father. Captain Bevan undertook to lay the matter before the Home Secretary.

Deferred Salary.

☞ In the Manchester County Court, on October 25, before his Honour Judge Heywood, John Henry Metcalf, assistant chemist and dentist, sought to recover the sum of 16*l.* 16*s.* from his former employer, Mr. Richard Twemlow, chemist, druggist, and dentist, 91 Upper Brook Street, Manchester. The plaintiff was represented by Mr. McKeand, barrister; and the defendant by Mr. Smith, solicitor. The case for the plaintiff, as stated by him in evidence, was that in January, 1889, he was engaged by the defendant as his assistant, at 25*s.* a week, with a commission on dental work, but as a matter of fact the defendant never gave him less than 30*s.* a week, and afterwards the amount was increased first to 35*s.* a week, and afterwards to 2*l.* After he had been at Upper Brook Street for some time he went to manage the defendant's shop in Ducie Street, Oxford Road. From May, 1891, to May, 1892, he received 2*l.* a week. In the latter month the business was as good as ever, and there was no reason to reduce his wages on that account, but the defendant came to him and told him that Messrs. Woolley were pressing him for an account he owed them, and in order that he might be able to pay them he would be glad if plaintiff would take 10*s.* a week less, which would be refunded to him when the defendant sold the business, as he was then trying to do. To oblige Mr. Twemlow, who was short of cash, he consented to do so. Of the amount he now claimed 8*l.* 10*s.* was for seventeen weeks' arrears of wages at 10*s.* per week, and 8*l.* for four weeks' wages at 2*l.* per week in lieu of notice. The remaining 6*s.* was for commission on dental work, but that he was prepared to forego. In cross-examination, he denied that his wages were reduced because the business had fallen off. Frank Fowler, who entered the defendant's employment in September, 1891, stated in evidence that the defendant offered the Ducie Street business to Mr. Gelston for 450*l.* or 500*l.*, but the business was afterwards sold to Mr. Pare for 350*l* Mr. Twemlow, the defendant, gave evidence to the effect that he was compelled to reduce plaintiff's salary because of "bad trade all round." The profits of the Ducie Street shop steadily decreased from the time Metcalf undertook the management of it. In the end he simply kept Metcalf on on sufferance from week to week. He ultimately told Metcalf that he would either have to submit to a reduction or have to go, and he gladly accepted the reduction, because, in addition to the money, he was provided with a house and coal and gas. He admitted that he promised to the plaintiff that, if Mr. Gelston purchased the business, he would endeavour to make it right with him as to the 10*s*; but Mr. Gelston did not purchase the business. In other respects he was prepared to do what he could in the way of befriending Metcalf if this dispute had not arisen. Cross-examined: He owed Messrs. Woolley 200*l.*, but they were not at all pressing him for the money. He was afraid they were going to press, and he said so to Metcalf, although he was sorry he had done so. With some little difficulty he could have paid Messrs. Woolley without selling the business. It was only out of kindness that he promised to see about the 10*s* in the event of Mr. Gelston purchasing the business. This was all the evidence. His Honour said there was an unfortunate discrepancy, such as often arose, between the evidence on the two sides. He could only consider which was the more reasonable or probable story. He thought it was quite clear that the defendant could not have wished to get rid of the plaintiff at a time when efforts were being made to sell the business. The plaintiff's story seemed an exceedingly reasonable one, and he decided in favour of the plaintiff for the full amount claimed, less a small sum which had been paid into Court. Judgment was given accordingly.

A Chemist's Manager's Claim.

In the Westminster County Court on Wednesday, before His Honour Judge Bayley, Mr. John S. Parker, a qualified chemist, sought to recover two weeks' wages for services rendered, and one week in lieu of notice from the defendant, Mr. Moore, who in June last was about to open a chemist's shop in Seymour Street, Bayswater. According to counsel's opening statement, the plaintiff was engaged by Mr. Rowe, manager to Messrs. Barclay & Co., wholesale chemists, who acted in this case as agent for the defendant. It was arranged by Mr. Rowe that plaintiff was to have a salary of 2*l.* per week and commission. He entered upon his duties in due course, but had only been there nine days when he was summarily dismissed by Mr. Moore, who stated that Rowe had no authority to engage him. He then asked for the wages due to him, but the defendant refused to pay him, and, consequently, this action was commenced. Mr. Parker,

in his evidence, said he was a qualified chemist. He first heard of this engagement through Mr. Rowe, who appointed him then and there to act as manager. In pursuance of the agreement he went to the shop at Seymour Street and admitted himself with the keys which Mr. Rowe gave to him. He at once set to work putting the shop in order for the purpose of starting the business, and engaged an assistant to help him. Altogether he was there for seven days at work, and did his utmost to put everything in order.

His Honour said it would be more regular to hear Mr. Rowe as to the agency.

Plaintiff, cross-examined, said he was dismissed by Moore at the end of nine days, and no reason whatever was given him. That happened on Tuesday, June 7. Rowe had known him for many years as having been in the employment of eminent chemists.

Mr. Alfred Rowe was then called, and said he was manager to Messrs. Barclay & Son, wholesale chemists, of Farringdon Street, and he had a conversation with Moore about the engagement in question. Moore asked him to engage an assistant for the business in question, and accordingly he engaged the plaintiff Parker for that purpose. The keys of the premises were handed by him to Parker. He (witness) could not say whether the plaintiff did any work in the shop or not. After the engagement witness saw the defendant on the subject, but could not say whether he told him on that occasion that he had engaged the plaintiff, but he saw him again at a later date, when he expressed great indignation at the engagement as he did not like the plaintiff's appearance.

Cross-examined: He admitted that a letter produced was in his handwriting, written to Moore, in which he praised the capabilities of the plaintiff as a manager. The defendant Moore then wrote back and expressed indignation at the plaintiff having been engaged without his having even seen a reference as to his capabilities as a chemist's manager. He (witness) was all along under the impression that Moore desired him to engage a manager, otherwise he would certainly not have done so. Moore might have only asked him to recommend a man, but his impression was that he was to engage one out and out.

The defendant's solicitor at this stage submitted that there was no case for him to answer; but his Honour said he thought there was.

The plaintiff was then recalled for further cross-examination, and said he formerly carried on business as a chemist on his own account at High Street, Camden Town; but he denied that a sixpenny dispensary which opened next door had crippled his trade. He did, however, give up his business, as trade was bad. He did not see the defendant Moore while he was at the shop, but he thought his engagement by Mr. Rowe on Moore's behalf was a thoroughly *bonâ-fide* one. He (plaintiff) left the premises at the expiration of nine days, and at the request of Moore, who said he did not want his services. Moore never told him that he would have nothing whatever to do with him, and that Rowe had no authority to engage him. He did not remember having answered advertisements in THE CHEMIST AND DRUGGIST, but he might have done so. He could not say whether he answered advertisements while he was at the shop in Seymour Street.

For the defence Mr. Moore was called and said he carried on business at Vigo Street, Regent Street. In June last he was engaged in promoting a chemist and druggist business in Seymour Street, Portman Square, and in the course of a conversation with Mr. Rowe he (defendant) said he should be wanting a manager to fill the position, but he must be a man of undoubted character and integrity, and must be a person of good appearance. Rowe then said he knew just such a man as would suit him, and that was as far as the matter went on that occasion. Subsequently he learned that the plaintiff was actually installed in the shop, but he (defendant) never gave any authority for the engagement, and told the plaintiff at once that he could not keep him, and even if he paid him 5*l.* a week to stay there.

Cross-examined: He was a builder by trade, but had had great experience of the chemistry trade. His authority to Rowe was to engage a first-class man with the highest qualifications and references, and also one who was a total abstainer. As soon as he saw the plaintiff he told him at once that it would be impossible for him to retain him in his service as he was totally unsuited to his requirements. He could not say whether or not there was a written authority for Rowe to engage a manager on his (defendant's) behalf, but there might be such a letter in existence.

Mr. Henry Haydon, manager to the defendant, said that a letter was received from the plaintiff in answer to an advertisement which appeared in THE CHEMIST AND DRUGGIST, and the letter arrived during the interval in which the plaintiff alleged that he was employed at the shop in Seymour Street.

Counsel for the plaintiff submitted that the defendant had admitted that he gave Rowe an authority to engage a manager under certain conditions, and it had not been proved that the plaintiff did not answer the requirements referred to.

The defendant had allowed the plaintiff to remain in his service for nine days and never took any action to repudiate the engagement, therefore it was clear that the plaintiff was entitled to be paid for the work which he had done, and to receive a week's salary in lieu of notice.

His Honour said he thought it was clear that the defendant was entitled to a verdict, as the plaintiff's letter which had been put in in answer to the advertisement stated that he was disengaged and could go in at any time. Verdict for the defendant, but there would be no order as to costs.

WHAT IS "LIQUORICE"?

AT the Southwark Police Court, before Mr. Marsham, October 26, E. J. Doidge, 78 Bermondsey New Road, wholesale confectioner, was charged, under the Sale of Food and Drugs Act, with having sold for liquorice a confection usually known as liquorice-pipe, the same not being of the nature and substance of the article asked for.

John Barker said that, at the instance of Inspector Thomas, he went to the shop of the defendant on September 16 last and asked for 1 lb. of liquorice. He was served by a girl. He paid for the article and gave it into the hands of the inspector, who came into the shop after the purchase. In answer to the defendant, he said he paid 6*d.*; he did not know what liquorice was.

Henry Thomas (inspector under the Sale of Food and Drugs Act) said he sent the last witness into the shop. He saw the girl and Mr. Doidge. He said he was an officer of the Vestry, and wanted the liquorice for analysis. He divided the purchase in the usual way, and sent one portion to the public analyst, who certified on the certificate produced that the article purchased contained 50 per cent. of liquorice extract and 50 per cent. of starch and other foreign matters.

Mr. Doidge said the previous witness asked for liquorice pipes. The girl who served the article was not in court. She was a new hand. She showed the purchaser a box of the liquorice pipes, and asked him, "Would that do?" and he said, "Yes."

The witness denied this.

Mr. Marsham: There is an article known as liquorice, is there not?

Mr. Doidge: They asked for liquorice, and the girl naturally thought the liquorice pipes were liquorice. People who bought "Solazzi" liquorice usually bought it in pennyworths or two-pennyworths.

Richard Bodner, public analyst to the Bermondsey Vestry, said he had examined the sample purchased, and gave the certificate produced.

Mr. Marsham: What is liquorice?

Mr. Bodner: There is the liquorice-root, and the more or less pure extract. He should have understood that the purchaser wanted the extract called "Solazzi" in the trade. An ordinary person going into a shop and asking for liquorice would mean that extract.

Mr. Doidge said the goods were invoiced to him as liquorice pipes, and his assistant told him that the purchaser when asked said they would do.

Mr. Marsham: But if I had gone into your shop and asked for liquorice, I should not have expected to get this.

Mr. Doidge: We should certainly have asked you what kind of liquorice you wanted.

Mr. Marsham: Why did not your assistant ask him?

Mr. Doidge: She wholly mistook him. He did not ask properly for what he wanted.

Mr. Marsham: I think he did. He certainly did not say "unadulterated," and you did not give him any label upon it to say it was half starch.—Fined 20*s.* and 12*s.* 6*d.* costs.

BANKRUPTCY REPORTS.

Re J. N. WISE, Claypath, Durham, Chemist and Druggist.

THE adjourned examination of this debtor was held recently. The Official Receiver stated that the amended deficiency account asked for at the last examination had been put in, while the debtor had answered other questions as to his father's will. Mr. A. M. Appleton, for the debtor, asked that a certificate as to Mr. Wise's health during the early part of 1891 be put in, and urged that in consequence of debtor's ill-health he had had to absent himself from his business and leave it to the care of assistants. In a great measure he attributed the debtor's state of affairs to the enforced neglect. The Registrar said that when the debtor made the application for his discharge before the judge would be the proper time to produce the certificate. Mr. Appleton said that was the reason he wanted the certificate formally put in. The Registrar ruled the application out of order, and the debtor was allowed to pass.

Re FRANK NORTHCOTT (trading as Northcott & Sons), 13 Rood Lane, E.C., Chemical-broker, &c.

THIS debtor attended a sitting of the London Bankruptcy Court on Friday, October 21, before Mr. Registrar Brougham, and applied to pass his public examination upon accounts showing total liabilities 2,925*l.* 6*s.* 8*d.* (unsecured, 2,620*l.* 17*s.* 7*d.*), and assets, 114*l.* 3*s.* 6*d.*

Questioned by Mr. G. W. Chapman, Assistant Official Receiver, the debtor stated that in 1875 his brother and he joined their father in the partnership of Northcott & Sons, chemical-brokers. Their father died about twelve years ago, leaving the business to them on the condition that they paid an annuity of 600*l.* to their mother from the profits. The capital due to their father was ascertained at that time to be about 1,700*l*, and it was allowed to remain in the business under the above condition. The annuity was paid to Mrs. Northcott in full for about four years, but it then had to be reduced owing to the diminution of the profits, and latterly it was only 100*l.* per annum, which sum had been paid up to last January. In 1886 the firm was in difficulties, and made a private arrangement with the creditors, who accepted a composition of 1*s.* 9*d.* in the pound. The liabilities then amounted to 5,000*l.* or 6,000*l.*, exclusive of Mrs. Northcott's claim in respect of their late father's capital. The composition was paid with the assistance of 150*l.* borrowed money, and witness and his brother continued to trade as before. The brother left the business about three years ago (June, 1889), neither receiving nor paying anything upon retiring from the firm. No statement of affairs was then made out, and witness gave his brother no written release from the liabilities then outstanding. The dissolution, however, was duly gazetted, and witness subsequently continued the trading alone down to the receiving-order, which was made on September 7 upon his own petition. He attributed his failure to insufficient capital and lack of business during recent years. The books of account recorded the profits made on the trading, and the drawings for personal and household expenses. They showed that the profits on the last four years' trading amounted to 1,460*l.*, and that the drawings for the corresponding period were 1,612*l.* The liabilities had been reduced during the past few years by several hundreds of pounds. In 1887 witness made a loss of 500*l.* over a tin contract. He admitted that it was a speculation, and that tin was hardly in his proper business, but he entered into the transaction because he did other business with the man, and anticipated being able to sell again at a good profit.

There was no opposition on the part of creditors, and the examination was ordered to be concluded.

Re SAUNDERS & SAUNDERS, Cleckheaton, Chemical Manufacturers.

THE Official Receiver for the Bradford district (Mr. J. Arthur Binns) has issued a statement of affairs in regard to the case of Thomas Bealby Saunders, and Ashby Varley Saunders, lately carrying on business in partnership as chemical manufacturers, at Cleckheaton, under the style of Saunders & Saunders. The debtors' statement of affairs shows liabilities expected to rank at 20,794*l.*, of which 11,026*l.* is owing to creditors unsecured, and 8,216*l.* to creditors partly secured. The debtors' property is estimated to produce 3,520*l*, the book-debts 1,378*l*, and the surplus from securities 3,611*l.*, leaving a deficiency of 12,133*l.* The debtors attribute their failure to want of capital to meet the rapidly-developing business, and to the heavy cost of the necessary extensions and alterations in connection with their premises and plant. The Official Receiver states that Thomas Bealby Saunders, who had made a practical study of chemistry, arranged in 1875 to join Mr. Hepworth, chemical manufacturer, at Westgate Works, Cleckheaton, as a partner. Mr. Hepworth was then in partnership with a Mr. Greenwood, and the value of the concern was estimated at 1,600*l.* Mr. Saunders, who had 1,000*l.* borrowed capital, paid 800*l.* to Mr. Greenwood, on taking his place, for his share in the concern, the remainder going into the business. The partnership was carried on under the style of Hepworth & Saunders until April 28, 1877, when Ashby Varley Saunders came in, bringing 1,500*l.* capital. Mr. Hepworth subsequently retired. The turnover of the business at the beginning was about 1,000*l.* a year, but it increased rapidly, till in 1891 it had reached over 31,000*l.* The working expenditure, which began at about 4*l.* per week, had increased to about 3,000*l.* a year. Considerable expenses had been incurred in plant and processes. The debtors have no offer to make to their creditors.

Re ROBERT SPENCER, Gooch Street, Birmingham, Chemist.

AT the Birmingham County Court, on October 20, before his Honour Sir Richard Harington, this bankrupt applied for his discharge on debts, 538*l.* 16*s.* 4½*d.*; assets, 38*l.* 12*s.* 6*d.* The Official Receiver reported that the bankrupt was entitled to a reversionary interest in his father's will, payable on the death of his mother. He anticipated receiving from the bankrupt 100*l.* to 120*l.* on that interest, but until that was received he could not state what dividend would be paid to the creditors. The bankrupt had omitted to keep proper books of accounts, and he attributed his insolvency to having left his name to be used by a firm named Nelson in Nottingham. The bankrupt commenced business as a chemist in West Bromwich, and afterwards took a shop in Nottingham, which he sold to a Mr. Nelson. At about the same time he entered into partnership in a coal business, by which he lost money. He had a fire at his shop at West Bromwich, and he was sued by Nelson's creditors, and lost the action in consequence of not being able to prove that the creditors had received notice of the transference of the business to Nelson. The case was reported in the trade journals, and claims amounting to about 250*l.* were made upon him. These he was unable to meet. His Honour said he should grant the discharge subject to a payment of 25*l.* The circumstances, he admitted, were peculiar, but he could not acquit the bankrupt of all blame. He must have been guilty of some neglect in allowing the business to be carried on as it was at Nottingham.

Re BOSS & PARR, 19 Mincing Lane, E.C., Colonial Brokers.

AN application for an order of discharge was made to Mr. Registrar Linklater, at the London Bankruptcy Court, last Tuesday, by Mr. Louis Scott Boss, a member of this firm.

The failure occurred in June, 1878, the accounts showing debts 3,686*l.* 18*s.* 11*d* and assets 1,590*l.* 11*s.* 11*d.* The receiving-order was made upon the petition of Messrs. Stafford, Allen & Sons, drug-grinders and manufacturing chemists, of Cowper Street, Finsbury. Mr. Arthur Cooper was appointed as trustee, and, being unable to realise sufficient from the assets to declare a dividend, he convened a meeting of the creditors in May, 1881, and explained the reason why no dividend had been paid.

There was no opposition to the application, and the learned Registrar granted the usual order of discharge under the Bankruptcy (Discharge and Closure) Act of 1887.

WORTH A PICTURE.—Said the small boy to his father on returning from school, "I shan't use Pears' soap any more, papa." "Why, my boy?" "Because it makes the hands soft, and then the pambies are very, very sore."

"SANITAS"
DISINFECTANTS & APPLIANCES

Illustrated Pamphlet Free on Application.

OUR LATEST NOVELTY IS

"SANITAS DISTEMPER,"

For WALLS, CEILINGS, &c.

THE SANITAS CO. (LIM.), BETHNAL GREEN, LONDON, E.

C. T. KINGZETT, F.I.C., F.C.S., Managing Director.

MUMFORD'S

(FARRINGDON ROAD, LONDON, E.C.)

THE BEST THAT CAN BE PRODUCED.

PURE CRUSHED LINSEED	18/	1 cwt. carriage paid; or 7, 14 & 28 lbs. free on rail Lond
PURE STARCH POWDER	26/	1 cwt. carriage paid; or 7, 14 & 28 lbs. free on rail Lond
PURE FULLER'S EARTH (Light Colour)	16/	1 cwt. carriage paid; or 7, 14 & 28 lbs. free on rail Lond
PURE FULLER'S EARTH	14/	1 cwt. carriage paid; or 7, 14 & 28 lbs. free on rail Lond

CARRIAGE PAID

To Railway Stations within the radius of 200 miles from London, and u to 2s. to Stations beyond, on 112 lbs. and upwards of above articles.

YOU CAN'T READ THIS WITHOUT YOUR SPECTACLES!

Day's Oil of the Night

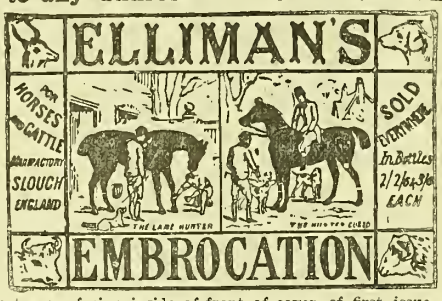
Is an Embrocative Balm for the People, and a source of profit to the Retailer

1s. 1½d. and 2s. 9d. NO CUTTING.

DAY & SONS, CREWE.

SHOW CARDS, 24×17 or 17×12,

Sent to any address in the United Kingdom



See first page, facing inside of front of cover, of first issue of this month, for latest particulars.

SILICATED CARBON FILTERS

PATENT SELF-AERATING MOVEABLE BLOCKS

WORKS, BATTERSEA LONDON. S.W.

MOSS'S MISCIBLE CASCARA

Mixes with Water. Certain and Pleasant.

Not Nauseous.

"A great improvement."

"A very elegant preparation of this drug."

"Superior to anything yet introduced."

—*Extracts from Letters.*

(REGISTERED)

See the Medical and Pharmaceutical Press.

In 1-lb. and 5-lb. bottles, thro House, or from the only

JOHN MOS

Galen Works, Ne

SCHWEI

GOLD MEDAL

AS SUPPLIEI

In Bottles

51 BERNERS

MAKE YOUR OWN TINCTUR

Fl

Concentra

Editoria

PHARMACY

WE are publishing this macy and Poison Laws coroners, magistrates, chemists, and unqualifi all benefit by the oppor the whole code of laws

to pharmacy, and especially to the sale of poisons. The keenness with which any laxity in regard to this dangerous business is regarded by Courts of Justice when this is demonstrated in cases of accidental or intentional poisoning is undoubtedly growing intenser, and is parallel with the modern development of interest in preventive medicine and sanitary protection for the public. Not now only, however, but always, the public has been peculiarly sensitive to the risks of poisoning, and very naturally so. The record of legislation as narrated in our treatise makes very clear the unanimity of members of Parliament in this respect. They, as representatives of the public, have manifested a very firm resolution not to be poisoned carelessly or criminally if Acts of Parliament will save them from such a fate. Some of them have at times brought forward quite impracticable proposals, but the purpose aimed at has always been unmistakable and definite.

There is a widely-spread error, and chemists themselves are not entirely free from it, that the Pharmacy Act of 1868 was a sort of private Act—that it was intended by the Legislature as a sort of reward to chemists, and especially that the exclusive right to the sale of poisons which the Act confers upon registered chemists and druggists is a *quid pro quo* consented to by Parliament in return for the examinations imposed. And when something has not gone quite satisfactorily, chemists burdened with the notion we have indicated have written to us advocating that as the Act has not fulfilled the anticipations of its promoters, it should be repealed. It is not uncommon, too, to hear criticisms on the Act implying that the pharmacists of a quarter of a century ago would have done better if they had inserted this or omitted that from the measure. Our new manual will, we hope, dispel views founded on this mistaken idea. On tracing the long-continued efforts of Parliament and Ministries to get some workable control over the poison-trade, and the eagerness with which the available points were seized upon in the Bills submitted by the Pharmaceutical Society and the United Society of Chemists and Druggists in 1866, it will be apparent that the Pharmacy Act, so far at any rate as it applies to the sale of poisons, is a statute of considerable public concern, and one which chemists could not get repealed at their own will.

Much more likely is it that the provisions of the Act will be rendered more stringent if any further enactment should be decided upon. And to a reasonable extent it would be, as we have often argued, the interest of chemists generally to facilitate such a policy. If legislative interference can do the trade any good, the way to get it is to work on the lines which Parliament has itself laid down. This is the path of least resistance. Governments do not care twopence about pharmaceutical curricula or researches. What they want is that patients shall get good medicines, and that poisons shall be restricted rigorously to their proper spheres.

Very properly, an acquaintance with the law governing the sale of poisons is now an essential to pharmaceutical qualification. This proviso has been adopted none too early. Nothing can be more unsatisfactory than to see chemists in courts of law or before coroners, ignorant of the requirements of the law in relation to the sale of poisons. And we have had to report such cases too frequently of late. There are special statutes hedging most classes nowadays more or less, and it is expected that those who practise any trade or profession will take care to become familiar with the requirements of the laws which specially concern them. We believe that our new book furnishes the means of getting as thorough and exact an acquaintance with the Pharmacy and Poison Laws of Great Britain and with those of Ireland as our other treatise, Alpe's "Handybook of Medicine-stamp Duty," supplies in regard to the Inland Revenue statutes relating to proprietary medicines. These, with the information provided in our forthcoming DIARY, will serve as a complete legal outfit for the chemist and druggist, such as, so far as we know, cannot be obtained in so handy a form elsewhere.

Interesting additions to The Pharmacy and Poison Laws of the United Kingdom are: (1) the reprint of the reports from "Hansard's Debates" of the discussions in Parliament on the Bills which became the 1868 and 1869 Pharmacy Acts; and (2) the legally-recognised reports from the *Law Times* of the action between the Pharmaceutical Society and a limited company which was carried to the House of Lords, and in which judicial views of the Pharmacy Acts were more fully expressed than in any other case. The proprietors of the publications named very courteously gave us permission to reprint the reports referred to, which add greatly to the completeness and value of our record.

MR. MOND'S CHLORINE RESEARCHES.

THE *Times* has had the honour of making the fact known to the world that Mr. Ludwig Mond, F.R.S., of Brunner, Mond & Co. (Limited), has carried to complete success those experiments on the preparation of chlorine from Solvay alkali-waste which technical chemists have been closely watching for some years. The particularly notable fact announced by the *Times* last Friday is that "chloride of lime, made by Mr. Mond's new process, is actually upon the market; a large and efficient installation is at work, and the increase of the output to any required extent is a mere question of time and plant." This, of course, is a great triumph, or will be if the future justifies the statement. The *Times* describes Mr. Mond's process in general terms. It will be remembered that in the Solvay process sodium chloride, carbon dioxide, and ammonia are brought into contact under suitable conditions, the result being the formation of sodium bicarbonate and ammonium chloride. Hitherto it has been the custom to subject the latter to treatment with lime for the recovery of the ammonia, with, of course, complete fixation and waste of the chlorine as calcium chloride. Time after time these fifty years and more chemists have attacked calcium chloride with a view to saving the chlorine and have been beaten. Now the *Times* tells us Mr. Mond has succeeded, so far as ammonium chloride is concerned, and that his process is as follows:—

Mr. Mond crystallises out the ammonium chloride, dries it, and subjecting it to heat, it sublimes and probably suffers temporary decomposition. The hydrochloric acid and the ammonia are passed over magnesium oxide, which gives up its oxygen, combining with hydrogen to form water. In place of the oxygen the magnesium combines with the chlorine of the ammonium chloride, and free ammonia is obtained and collected in the usual way. Next the reaction which produced magnesium chloride is exactly reversed. Hot air is passed over the chloride as hot chlorine was passed over the oxide, and as the chlorine of the ammonium chloride drove out the oxygen of the oxide, so now the oxygen of the air drives out the chlorine of the chloride. The free chlorine is passed over the caustic lime from the kilns after it is slaked with water, producing bleaching-powder, and the magnesium oxide is left in its original condition ready to decompose a fresh batch of ammonium chloride.

This description is generally correct, but it wants precision, and the statement that the ammonium chloride is dissociated is purely imaginary. The writer is also in error in stating that hot chlorine is passed over the magnesium

oxide. It will be seen, however, that the process works on the old lines made so familiar to alkali-chemists by the Weldon-Pechiney process, of which so much was expected five years ago. It starts from the observations made by Sir Humphry Davy and Thomas Graham that when magnesium oxide, hydrochloric acid, and air are heated together, chlorine is set free. In the reaction the magnesium oxide plays a catalytic part: first, it seizes the chlorine of the hydrochloric acid, and its oxygen joins the hydrogen; second, hot air combines with the magnesium chloride, forming an oxychloride; and, third, as the temperature increases chlorine is driven off, thus leaving the magnesium oxide in its original state. For more than fifty years chemists have been endeavouring to carry out these reactions on a practical scale, but all attempts have failed hitherto, mainly for two reasons —viz., that the amount of fuel required to work the process is enormous, and the temperature at which the final reactions take place, at least 1,000° C., is frightfully destructive of plant. When Professor Dewar described the Weldon-Pechiney process to the London Section of the Society of Chemical Industry five years ago, success appeared to be achieved, and no experiments could have gone off more beautifully than those which he conducted. Sir Henry Roscoe said then that the process and apparatus were amongst the most skilful which he had ever seen; but most of the Leblanc alkali-makers present were confident that they had nothing to fear. It is now seen that they were right; the mechanical and pecuniary difficulties have been too much for the Weldon-Pechiney process. And the same tale might be told of many another.

We have said that only the future can tell whether Mr. Mond has secured success or not; but in the meantime let us examine his method a little more closely. In the first place, his apparatus consists of two vessels—one for volatilising the ammonium chloride, and the other, or magnesia-vessel, for decomposing that vapour. Two triple-necked Wolff bottles, suitably connected, would give a fair representation of the plant in outline. The volatilising-vessel has been Mr. Mond's great difficulty. Ammonium-chloride vapour readily attacks iron, nickel, and many other metals, but two years ago he found that antimony was not so attacked, therefore he lines the iron volatilising vessel with antimony, or an antimony alloy, and to prevent fusion (as antimony melts at 425° C.) the vessel is filled with fused zinc chloride above the line of the fire outside the vessel. The ammonium chloride is then fed into the vessel, and is volatilised at a temperature of 350–400° C., the vapours being driven into the second or magnesia vessel. The arrangement of two Wolff's bottles will make that point clear. As ammonium chloride dissociates at 1,040° C., it is obvious that the vapour must be ammonium chloride, and not NH_3 and HCl; nor while the vapour is exposed to the action of the magnesia is the dissociation temperature reached. The magnesia-vessel is partially filled with small balls of a mixture consisting of magnesia 100 parts, china clay 75 parts, and lime 6 parts, made into a paste with potassium-chloride solution. The object of the mixture, and of its being in balls, is to secure as large an acting-surface as possible. Mr. C. T. Kingzett suggested, in 1888, that a coating of magnesia upon pumice, or any other inert material, sufficed to maintain the Weldon-Pechiney reaction, and his idea was somewhat poch-poched at the time, but there was apparently something in it after all. At any rate, Mr. Mond finds it advantageous to work with a large surface, and the first effect is, as the *Times* states, that the ammonium chloride is decomposed, and ammonia is given off up to a certain point, when the stream of ammonium-chloride vapour is cut off. Apparently, the action so far is one simply of double decomposition, ammonium hydrate and hydrated magnesium chloride being produced: there is, therefore, a limit to the reaction, hence the shutting-off of the volatilising-vessel. The next step is to heat the magnesia-vessel, when residual traces of ammonia and then hydrochloric acid are driven away; finally, dry air, heated to 800° to 1,000° C., is led into the vessel, and the effect of this, as in the Weldon-Pechiney process, is to drive out the chlorine from the oxychloride. The magnesia returns to its old condition, and is ready to do more work. It thus appears that we are dealing here with a process which, with the exception of the ammonia element—and that is practically immaterial—is similar to many which have failed. The decomposition and reactions of hydrated magnesium chloride and of magnesium oxychloride are matters of common knowledge, and the task that Mr. Mond has set himself is to overcome the mechanical difficulties which have hitherto baffled engineers: he has the same high temperatures to contend with, the same non-plastic materials to handle. He is a confident man, and a skilful; he has wealth behind him and a company which pays 50-per-cent. dividends. These are the elements of success, and to these we have to add the extraordinary advances which Mr. Mond has made in economising fuel and the mechanical difficulties which were overcome to ensure that economy. These are levers in his hands ready now to turn on to his chlorine-recovery process that powerful stream of force the cost of which has ruined other similar processes. In the face of these facts there is at least some hope that the utilisation of Solvay waste chloride is within measurable distance; but as the expense of producing the bleaching-powder depends entirely upon the cost of the apparatus, fuel, and labour, none but Mr. Mond can say whether he can touch the production figure of the comparatively inexpensive process employed by the Leblanc makers. Meanwhile the report of his success has not affected the commercial position of bleaching powder, one way or the other, and Mond "bleach" is not known, nor has it been seen on the London market.

CONTINENTAL PATENT-MEDICINE REGULATIONS.

It has long been the excellent practice of the United States Government, on occasions when it appears desirable to obtain a comprehensive and accurate knowledge of the manner in which some trade is carried on, or of the action of laws upon a given subject in the various countries of the world, to instruct its consular representatives to gather the necessary information and to publish the replies as a whole for the benefit of persons specially interested in the question. The most recent instance of this practice has been the issue of a circular letter to the American consuls abroad, asking for information concerning the laws affecting the sale of proprietary medicines in their districts. The answers received present an interesting epitome of the way in which this important branch of industry is regulated in the chief countries of Europe.

In Austria-Hungary patent medicines in the strict sense of the term do not exist, for the law affords no protection to any medicines or medicinal compounds the formulæ of which are not kept at the pharmacist's shop for the inspection of qualified medical men. Unless that condition is complied with, the article may not even be offered for sale, even by a pharmacist. Dietetic and cosmetic preparations (including dentifrices), mineral waters (natural or artificial) and spring products, and surgical dressings of all kinds are exempt from this regulation.

In Belgium the trade in patent medicines is regulated by a Royal decree of March 1, 1888, which provides that such medicines shall be sold or exposed for sale only by pharmacists or other persons authorised to deliver compounded medicines. The seller must affix his seal either as a substitute for or in contiguity to that of the manufacturer. Pharmacists assume the responsibility of the product delivered on these conditions. The bottle must bear a label mentioning the substances contained in the composition of the patent, but if the remedy is inscribed in an official Pharmacopœia (Belgian or foreign) it is only necessary that the label should show the official denomination. This label must bear the name and address of the pharmacist in printed characters.

In Denmark not only the sale, but also the importation of patent medicines is restricted to qualified pharmacists. An old law enacted in 1779 still remains in force in that kingdom, under which the advertising of patent medicines in public journals is absolutely prohibited; but at the present time that Act has partly fallen into desuetude, and advertisements are allowed to appear provided that they do not name any persons other than qualified pharmacists as sellers of the article. As there are only 160 such chemists in business in the country, the patent-medicine trade is a lucrative accessory to the business of these favoured few. It is, therefore, not likely that—in Denmark, at least—pharmacists will give much support to the resolution adopted at the recent meeting in Copenhagen by the pharmaceutical section of the Congress of Scandinavian Scientists, expressing regret that there are no legislative restrictions in Denmark and Norway on the importation of patent and secret remedies, and urging pharmacists to co-operate in the most earnest manner in putting down the trade in such preparations.

France has always maintained a reputation for the Draconic severity (on paper) of its laws on the subject of patent medicines, yet there is no country where the "spécialité" industry has assumed such immense proportions. The principal Act relating to the sale of these goods is the famous pharmacy law of 1810, though various modifications have since been grafted upon it. It originally prohibited the sale of any medicine of which the formula had not been inserted in the "Codex," but in 1850 a concession was made to the spirit of the time by the admission for sale of medicines recognised as new and useful by the National Academy of Medicine and of which the formula has been approved by the Ministers of Agriculture and of Commerce. This official sanction does not appear to be difficult to obtain, for it is rare to find a French pharmacien who has not invented from one to a dozen medicinal compounds, while the English community experience little difficulty in obtaining their favourite proprietary pill or potion unless they insist on store prices.

The Frankfort-on-Maine Consul reports that in Germany patent medicines may be imported duty-free unless they contain ether, alcohol, sugar, or some other ingredient which is subject to duty. In such case the mixture is assessed for duty at the rate which is applicable to its ingredient which bears the highest rate of duty. They may only be sold, however, by qualified pharmacists, who are held responsible by law for their effects upon the patient. The consul therefore recommends exporters of such goods to Germany to label them, "for the information of the apotheker," with a slip designating the ingredients which they contain—a piece of advice not likely to be widely followed. An old Prussian law (now applicable to the whole of the Empire, but rigorously enforced in Prussia and Baden only) forbids the advertising of patent medicines in public journals. This law is circumvented by many foreign dealers. Thus the proprietor of a well-known American remedy for diabetes and kindred diseases, who has maintained for years an agency at Frankfort, has obtained a concession which permits him to advertise his goods in Wurtemburg; for the remainder of Germany he has adopted the plan of making his medicines in this city for sale through authorised apothekers, but sends out his advertisements from London as circulars or pamphlets, to be folded in the German newspapers where this is permitted.

In Italy, since 1887, no patent medicines (in fact, no medicinal drugs or compounded medicines of any kind) are allowed to be imported unless approved by the Central Board of Health (*Consiglio Superiore di Sanita*), to which a statement of their composition must be furnished by the petitioner along with his request for approval of the remedy. The punishment for the infringement of this law is cumulative, beginning with a minimum fine of 200f., and increasing to fifteen days' imprisonment for each offence. The Central Board of Health is composed of five doctors of medicine, two sanitary engineers, two naturalists, two chemists, one veterinary surgeon, one pharmacist, one lawyer, and two business experts.

Russia has recently distinguished itself by the enactment of one of the most stringent laws ever drafted against the import of patent medicines. Simple drugs are still admitted freely upon payment of the duty, but no patent medicine is allowed entry without obtaining each time special permission from the Medical Department of the Ministry of the Interior. Before such permission is granted it must be proved to the satisfaction of the Department that the production of the medicine requires elaborate work and expensive apparatus, that it is beneficial in its action, and that it can be transported long distances without injury to its efficacy. The applicant, in his request for admission, must state the composition of his article "in minute detail."

Cosmetics are examined only in case their labels or the accompanying descriptions indicate that they can be used for medical purposes. Cosmetics of which the labels and descriptions show that they are harmless in their effects on the skin, hair, and gums are exempt from this formality.

This new Russian law appears to answer the object of its promulgators, for we are told that "the published list of medicines excluded from entry includes nearly every known pharmaceutical preparation."

The Swedish patent-medicine laws are over two centuries old (they date from 1688), and it is therefore not surprising to hear that they are now not generally enforced. None but qualified pharmacists may advertise medicines of any kind in the public press or import them. The importation of articles not considered exclusively as drugs—such as gums, liquorice, &c.—is free.

In Turkey there is no restriction upon the importation of patent or other medicines, with the exception of the payment of Customs duty, and quite recently the Turkish Government has prepared a law establishing a band or stamp tax of 10 paras (½*d.*) for every bottle, box, or package of medicine. This law is intended to be put into force as soon as certain pending negotiations between the Porte and several European Powers are brought to an end. In some instances, however, the stamps have already been affixed, and the ½*d.* tax is collected on all sulphate of quinine, which can only be imported at a few Turkish ports—viz., Constantinople, Salonica, Smyrna, Beirut, &c. The importation of chlorodyne, collodion, nitro-glycerine, chlorate of potash, and cannabis indica cigarettes is altogether prohibited, but the fact that these drugs are sold at some shops shows that the prohibition is not very strictly enforced.

NEWSPAPERS ON THE SALE OF POISONS.

REFERRING to the chemist's evidence in the Neill trial, several of the papers, misled by the Judge's questions, have commented on what they evidently believe to have been some illegality in the sale of the tincture of nux vomica to Neill by the chemist's assistant. The assumption seems to have been that the sale ought to have been entered, or not made at all unless the vendor ascertained that the purchaser was a *bonâ-fide* medical man. It is not necessary to say here that there is nothing in the Acts requiring these conditions. The *Daily Telegraph* says :—

"It is certainly extraordinary that this one trial should have revealed striking irregularities on the part both of a doctor and a chemist—the doctor who certified the cause of death of one of the victims, and the chemist who sold the murderer his poisons."

And again—

"The chemist was culpably careless in failing to take down at the time when he sold Neill some of his poison all the particulars required by law; and the selling of poisons at all to a person who was practically a stranger to him was a most improper proceeding."

The man who wrote that article evidently had not taken the smallest trouble to ascertain what the requirements of the law were before he pronounced judgment; one more illustration of the necessity for caution before accepting as facts the authoritative-looking assertions in a leading article. The *Pall Mall Gazette* sent a couple of representatives to West-end chemists. One brought back a copy of the Poisons Schedule, which was printed in the paper, and the "well-known West end chemist" was reported to have said :—

"Chemists are protected if a prescription is given. I should keep the prescription if I sold a poison on the strength of it. As a matter of fact, I think I should have no difficulty in detecting a bogus prescription. It is true that prescriptions are signed with the initials of practitioners, but the amateur's hand is pretty certain to be betrayed."

The other chemist told his interviewer a plaintive story of the difficulties in the way of chemists in consequence of the carelessness and illegible writing of physicians. Both remarked on the extent to which grocers and oilmen sell poisons, but both agreed that the Act was being more efficiently enforced now.

The *Sunday Times* has a long article dealing with the sale of poisons to anybody with a respectable appearance and a glib tongue, urges that the present restrictions are no safeguard at all, and trusts

"that one result of the unravelling of this unspeakably cold-blooded series of murders will be that the sale of poisons by dispensing chemists will be entirely prohibited."

The youth who wrote that article should be the next Home Secretary.

COMMENTARY.

LIQUID AMMONIA.—At one of the recent meetings of the Franklin Institute (Chemical Section) a paper was read, by Dr. Hans von Strombeck, on "The Composition of the Liquid Ammonia of the Trade, and how to Manufacture Liquid Ammonia of really 99 995 per cent." In the course of this some interesting particulars were given. For example, the so-called anhydrous ammonia was found to yield, on evaporation, crystals of ammonia sesquicarbonate—not much, certainly, but it was there; and more noteworthy still was the presence of from 0 004 to 0·035 per cent. of mineral oil, to which the faint yellow colour of anhydrous ammonia is due. There was present also from 0·117 to 2·88 per cent. of a colourless fluid, having a specific gravity of 0·7948 at 60° F. This, on fractionation, was found to consist of methyl, ethyl, and isopropyl alcohols, acetone, and methyl-ethyl-ketone, besides traces of ethers. In the process which the author has devised for making the almost absolute ammonia (it contains 0·005 per cent. of mineral oil, but nothing else than NH_4HO), the author removes these alcohols and ketones by passing the ammonia-gas through a vessel containing fused sodium, the result being that sodium derivatives of the organic bodies are formed with the elimination of hydrogen, and the ammonia sesquicarbonate is decomposed according to the following equation :—

$$[(NH_4)_2CO_3 + NH_4HCO_3] + 2Na_2 = 3NH_3 + 2Na_2CO_3 + 2H_2.$$

The hydrogen is absorbed on passing the mixture of it and ammonia gas through palladium. It looks costly to speak of sodium and palladium in connection with a commercial process but, as a matter of fact, the increased cost is less than 1c. per lb.

EVERY LADY HER OWN DISTILLER.—The London correspondent of the Belfast *Northern Whig* has been turning his (or her) attention to the question of utilising herbs. The subject is large, not to say vast. It ranges from the munching of thistles along the roadside to the subtle craft of the pharmacist. There is plenty of room in it for everybody, and it is therefore regrettable that the correspondent, instead of confining herself to that branch which treats of culinary economy, has meandered out of her element into the department which teacheth of the distillation of herbs, and occasionally overlaps the domain of chemistry. The unfortunate victim has been thus lured out of her depth by a Mrs. Douglas, who is a Scotchwoman, and confesses to a weakness for peppermint drops at church. This latter-day Loreley, instead of combing her locks and warbling on a rock projecting from the stream, lectured recently on "Distillation" at the Agricultural Hall. She is, in vulgar phrase, nuts on pharmacists, and advises ladies to distil their own preparations, "instead of buying expensive, and too often injurious preparations from chemists." Nothing is easier for the average housewife, it would seem, than to make her own scents, flavouring essences and medicines, from the humble dill-water, "so largely diluted by chemists that those who cannot make it themselves would do well to buy oil of dill, and mix it with sugar and water," to "rosemary hair-washes and soap flavourings." The still is to be of "the finest Bohemian glass, with measuring-glasses to correspond, and supplemented by a balance of polished wood, with shining brass scales and fairy-like weights." If, as the lecturer anticipates, a "home-distilling craze" should set in, the sale of these "fairy-like" appliances would certainly yield the badgered pharmacist a far better profit than he is likely to derive from the retailing of pennyworths of dill-water and the like. We, therefore, heartily wish that Mrs. Douglas may be able to inoculate society effectually with her distilling-virus, and our pleasure is tempered only by the reflection that by the time the drawing-room carpet has been thoroughly spoilt, the baby treated to a stiff dose of "Mamma's own" rosemary hair-wash, and the home-distilled dill-water been incorporated into the soup as a flavouring-ingredient, the master of the house may lift the "still small voice of reason," put his foot down, and stop the fun.

THERE are no bigger words in the English language than Metadiazotetralkyldiamidotriphenylmethanchloride, Metaethoxydiethyldibenzildiamidotriphenylmethane, and Methylbenzomethoxyethyltetrahydropyridinecarboxylate.

TINCTURE OF GREEN HELLEBORE.

BEING A CONTINUATION OF THE CONTRIBUTIONS ON THE SOLVENT ACTION OF ALCOHOL OF DIFFERENT DEGREES OF STRENGTH ON SOME OF THE DRUGS USED IN MAKING PHARMACOPŒIAL TINCTURES.

By E. H. Farr and R. Wright, Pharmaceutical Chemists.

GREEN HELLEBORE is a member of a group of plants which are characterised by the presence of active principles possessing very powerful and poisonous properties. Owing to the striking similarity in the physiological effects produced by the different members of the group, it is scarcely to be wondered that when Meissner, in 1819, had established the presence in cevadilla seeds of the alkaloid sabadilline or veratrine, it was generally assumed that the closely-related plants, white and green hellebore, owed their activity to the same substance.

The presence of veratrine in the rhizome of *Veratrum viride* was definitely asserted in 1838 by Worthington, and subsequently by Richardson, Scattergood, and Percy. In 1865 Bullock claimed to have shown that *Veratrum viride* contained two alkaloids, neither of them identical with veratria, and one of which was soluble in ether, and the other insoluble. For these alkaloids the names "viridine" and "veratroidine" were suggested by Dr. G. B. Wood.

As far back as 1837 Simon had established the presence in *Veratrum album* of an alkaloid remarkable for the insolubility of its sulphate, which he named "jervine," and in 1872 Peugnet showed that the same alkaloid was present in the rhizome of *Veratrum viride*; and further claimed that the viridine of Bullock was a mixture of veratroidine and jervine.

In 1875 an elaborate thesis on the active principles of the official veratrums was published by C. L. Mitchell. As the result of a prolonged and careful investigation into the subject, he confirmed the statement of Peugnet with regard to Bullock's viridine, proving conclusively that it must have been a compound substance, and further maintained that veratroidine and jervine were the sole alkaloidal constituents of the drug.

In 1876 Wormley claimed to have obtained from the drug an alkaloid possessing all the characters of veratrine, and, to make the subject still more confused, in the same year Bullock published a paper in which he stated his belief that so-called veratroidine was simply a mixture of jervine and resin, and that jervine itself was the only alkaloid present in *Veratrum viride*.

In 1879 the drug was submitted to a very thorough examination by Wright and Luff. These chemists succeeded in isolating and characterising no fewer than six alkaloids from the rhizome—viz., jervine, pseudojervine, rubijervine, cevadine, veratrine, and veratralbine. Of the alkaloids obtained, about 50 per cent. consisted of cevadine, with 25 per cent. of jervine, and about 20 per cent. of pseudojervine. Veratrine and veratralbine were only present in infinitesimal proportion.

In addition to the alkaloidal constituents, the rhizome of *Veratrum viride* also contains a considerable amount of resinous matter, and Worthington has pointed out the presence of sugar and gallic acid.

The percentage yield of alkaloids, as recorded by different observers, varies very considerably.

Mitchell (*Trans. Amer. Pharm Assoc*, 1875) obtained the following amounts from three specimens of the root:—

	Jervine Grains	Veratroidine Grains per lb.		Jervine Per cent.	Veratroidine Per cent.		Total Alkaloids Per cent.
No. 1 ..	16	18·3	=	·23	·26	=	·49
No. 2 ..	18·2	24·5	=	·26	·35	=	·61
No. 3 ..	20·5	22·6	=	·29	·40	=	·69

Wright and Luff (*Journ. Chem. Soc*, 1879) only obtained ·080 per cent. total alkaloids. Bullock (*Amer. Journ. Pharm.*, July, 1879) reported a yield of 6·6 grammes per kilo, or ·66 per cent., from a specimen of rhizome examined by him. These records show an alkaloidal yield of from ·080 to ·69 per cent., and if the drug were perfectly exhausted the resulting tincture might be expected to show a yield of from ·016 to ·15 per cent. total alkaloids. Fletcher (CHEMIST AND DRUGGIST, January, 1889) fixes the alkaloidal strength of the tincture at ·076 per cent., and in some experiments the results of which were communicated to the Leeds meeting of the Pharmaceutical Conference, we reported a percentage of ·076 and ·129 respectively.

For the purpose of the present investigation twelve specimens of the drug were obtained, and, after being reduced to No. 40 powder, a series of tinctures were made from each, with alcohol of 90, 80, 70, 60, and 50 per cent. strength by volume. The B.P. process was followed, percolation being continued until the requisite volume of tincture had been obtained. Preliminary experiments with a view of ascertaining the process best adapted for the extraction of the alkaloids showed that chloroform took out a larger proportion than ether. The following process was therefore employed for the alkaloidal estimations:—50 c.c. of the tincture was introduced into a porcelain dish and evaporated over a water-bath, with addition of water, until all spirit had been removed. The residual liquor was acidified with dilute hydrochloric acid, and was filtered through cotton-wool into a glass separator. The deposited resin was found to retain a portion of the alkaloid, and it was therefore re-dissolved in a little 90-per-cent. alcohol, the solution treated with acidulated water and again evaporated to drive off the spirit, and the liquid filtered into the separator. The mixed liquids were then rendered alkaline by the addition of ammonia in distinct excess, and the alkaloid extracted by agitation, first with 10 c.c. and then with two successive 5 c.c. chloroform. The chloroformic alkaloidal solutions were drawn off in turn and mixed, and the alkaloids taken out by shaking with successive small quantities of 1-per-cent.

TABLE I.

Showing Quantitative Results of Estimation of Samples of Tincture of *Veratrum viride*.

No.	Amount of Alkaloid in Grammes from 100 c.c. Tincture.					Amount of Extractive in Grammes from 100 c.c. Tincture.				
	90-per-cent. Tincture	80-per-cent. Tincture	70-per-cent. Tincture	60-per-cent. Tincture	50-per-cent. Tincture	90-per-cent. Tincture	80-per-cent. Tincture	70-per-cent. Tincture	60-per-cent. Tincture	50-per-cent. Tincture
1	·108	·132	·124	·127	·104	2·83	3·56	4·10	4·20	4·28
2	·104	·109	·131	·104	·108	1·80	2·22	2·60	2·90	3·18
3	·126	·132	·130	·126	·103	2·20	2·88	3·36	3·50	3·70
4	·140	·142	·158	·152	·134	1·03	1·42	1·88	1·70	1·90
5	·089	·109	·118	·108	·088	1·52	2·03	2·33	2·36	2·32
6	·102	·108	·106	·093	·088	2·10	2·94	3·26	3·30	3·54
7	·138	·144	·144	·144	·140	1·00	1·34	1·62	1·86	2·08
8	·032	·028	·032	·028	·028	1·20	1·34	1·62	1·60	1·62
9	·183	·203	·212	·220	·216	1·20	1·58	1·76	2·00	2·12
10	·164	·172	·184	·196	·180	2·02	2·66	3·28	3·34	3·24
11	·168	·180	·192	·216	·220	1·94	2·48	2·76	2·96	3·32
12	·110	·118	·130	·128	·121	1·80	2·14	2·38	2·56	2·68
Average	·122	·132	·138	·137	·128	1·75	2·22	2·57	2·69	2·83

hydrochloric acid. The mixed acid alkaloidal solutions were then made alkaline with ammonia, and the alkaloids shaken out with 15 c.c. chloroform, used in three portions. Finally, the mixed chloroformic solutions were evaporated in a platinum dish over a water-bath, the residue dried at 100°, and the dish transferred to a desiccator and the weight taken on cooling.

The process presents no great difficulty in working, but great care is needed in order to secure perfect extraction of the alkaloids from the chloroformic solution by means of acidulated water. This appears to arise from the tenacity with which the resinous matter present adheres to the alkaloid, but may also be due in part to the sparing solubility of the alkaloidal salts produced. In some instances it was found necessary to employ fourteen or fifteen successive portions of acidulated water for the shaking-out process before it came away free from alkaloid; it is therefore very important that the process should be repeated until the final washings give no reaction with Mayer's reagent. The process may be considerably shortened by taking the first chloroformic alkaloidal solution, adding 1 c c normal HCl and 10 c.c. water, evaporating over a water-bath with constant stirring until all chloroform has been removed; filtering from particles of resinous matter, washing the latter with acidulated water until the washings come away free from alkaloid; mixing the liquids, making the solution alkaline with ammonia, shaking out the alkaloids with 15 c.c. chloroform added in three portions, drawing off the latter into a dish, and evaporating, drying, and weighing.

This modification gives slightly higher results, but the final residue is more highly coloured than that obtained by the original process.

The alkaloidal residues were in a partly amorphous, partly crystalline condition. They were, for the most part, entirely soluble in 2-per-cent. acetic acid; but in some cases a slightly turbid and coloured solution was yielded, owing, doubtless, to the presence of traces of resinous matter. In consequence of their composite nature it was not thought advisable to test their reactions with alkaloidal reagents.

In addition to the estimation of the total alkaloids it was thought desirable to estimate the relative amounts of jervine

TABLE II.

Showing Percentage of Jervine and Veratroidine in the Tinctures, and also (by Calculation) in the Drug.

Series	Mixed Alkaloids from 100 cc. Tincture (Highest Yield)	Percentage of Jervine in Tincture	Percentage of Veratroidine in Tincture	Percentage of Alkaloids Indicated in Rhizome		
				Total Alkaloids	Jervine	Veratroidine
1	·132	·028	·104	·860	·140	·520
2	·131	·043	·088	·655	·215	·440
3	·132	·057	·075	·660	·285	·375
4	·158	·035	·123	·790	·175	·515
5	·118	·030	·038	·590	·150	·440
6	·108	·027	·081	·540	·135	·405
7	·144	·049	·095	·720	·245	·475
8	·032	·013	·019	·160	·065	·095
9	·220	·070	·150	1·20	·350	·750
10	·196	·078	·118	·980	·390	·590
11	·220	·062	·158	1·20	·310	·790
12	·130	·039	·091	·650	·195	·455
Average	·143	·044	099	·734	·221	·49

and veratroidine (veratroidine = alkaloids other than jervine) present in the alkaloidal residue from each series of tinctures, by Dragendorff's nitrate-separation method. In order to accomplish this the residues from each series of tinctures were dissolved in 2-per-cent. acetic acid; and the estimation made as follows:—

A measured quantity of the acetic solution was treated with a few grains of potassium nitrate, and the mixture shaken and allowed to stand for some time. The clear liquid was removed with a pipette, the crystals washed with a little water, and the latter drawn off when clear. The mixed liquids were measured, made alkaline with ammonia, the alkaloid shaken out with chloroform, the latter solution drawn off and evaporated, and the residue dried and weighed.

The jervine in the precipitated nitrate was estimated by shaking with ammoniated water and chloroform, the latter being employed in two or three portions in order to remove the last traces of alkaloid. After the weights had been taken a correction was made in each case for the solubility of jervine nitrate. This was taken as 1 in 1,200, or 005 gramme for each 6 c c. solution, which was added to the weight of the jervine indicated, and subtracted from that of the veratroidine. The results are shown in Table II, and indicate the proportions of jervine and veratroidine in the mixed alkaloids obtained from 100 c.c. of tincture in each series, and also the percentages (1) of mixed alkaloids, and (2) of jervine, and (3) of veratroidine indicated in the rhizome from which each series of tinctures had been prepared.

The amount of extractive in the tinctures was ascertained by evaporating 10 c.c. of each sample over a water-bath, drying the residue at 100°, weighing, and multiplying the result by 10.

The effect produced on mixing the tinctures with water, and also with 90-per-cent. alcohol, was noted, but the results were so much alike that it is not thought necessary to insert them in tabular form. Admixture with water gave a milky emulsion, from which, on standing, much resinous matter separated out. In the 60 and 50-per-cent. tinctures a little mucilaginous matter was present, but the quantity was very small, addition of 90-per-cent. alcohol only producing faint opalescence.

It will be seen on reference to Table I. that the most perfect exhaustion of the drug is effected by the employment of a 70-per-cent. menstruum. The yield of alkaloid by the tinctures prepared from different specimens of the drug varies between the extreme limits of ·032 and ·220, and proves most conclusively the urgent need there is for the adoption of such a process for the preparation of the tincture, and the application of such tests to the finished product as shall ensure constancy in the strength of so potent a medicinal agent. The drug from which No. 8 series of tinctures were prepared was in all respects a remarkable specimen. The tinctures prepared from it had a distinct green tint, and the alkaloidal yield came out very low; but when tested with the usual reagents the alkaloids behaved exactly like those from the other tinctures. In estimating some of the 50-per-cent. tinctures an emulsion was produced when the alkaline residual liquor was shaken with chloroform. This difficulty was overcome by running off the chloroform magma, and liberating the chloroform by agitation with a little 90-per-cent. alcohol. In order to ascertain

TABLE III.

Showing Results of Process Experiments.

No.	Alkaloid per Cent.				Extractive per Cent.			
	By Simple Maceration	By Double Maceration	By B.P. Process	By Continuous Percolation	By Simple Maceration	By Double Maceration	By B.P. Process	By Continuous Percolation
1	·104	·114	·124	·150	2·00	2·04	2·46	2·80
2	·170	·200	·210	·210	1·24	1·30	1·44	1·52

what process was best adapted for securing perfect exhaustion of the drug two good specimens were selected, and a series of tinctures made from each, with a 70-per-cent. menstruum, by the following processes:—

1. *Simple Maceration.*—Two ounces of the drug in No. 40 powder was macerated for seven days in 10 fl. oz. menstruum, with occasional agitation. The fluid portion was then strained off and the marc submitted to pressure, the liquids mixed and made up to 10 fl. oz., and the whole filtered.

2. *Double Maceration.*—Two ounces of the drug in No. 40 powder was macerated with 5 fl. oz. of menstruum for forty-eight hours, with occasional agitation. The fluid portion was strained off and the marc submitted to pressure, the pressings being added to the strained liquid. The marc was then macerated with the remainder of the menstruum for twenty-four hours, the fluid portion strained off, the

marc again expressed, the liquids mixed, and a sufficiency of menstruum poured over the marc to make the volume of the tincture, after the final expression, up to 10 fl. oz.

3. *Macero-percolation*—The process of the B.P., the final portion of the tincture being displaced.

4. *Continuous Percolation*—Two ounces of the drug in No. 40 powder was moistened with 3 fl. drachms menstruum and packed in a conical percolator, more menstruum was then added, and percolation allowed to proceed, slowly and continuously, until 10 fl. oz. of percolate had been obtained.

The tinctures prepared as above were estimated by the process already given, with the results stated in Table III. It is evident from those results that the most perfect exhaustion of the rhizome of *Veratrum viride* may be effected by the process of continuous percolation.

SOLUTIONS OF MEDICINAL RESINS.

By HAROLD WYATT, JUNR. Read before the Liverpool Pharmaceutical Students' Society on October 27, 1892.

EARLY in the year my interest was excited by a question asked at one of the meetings of the Liverpool Pharmaceutical Students' Society as to the best method of making a solution of jalap resin in glycerine for use as a rectal injection. The usual mode of dealing with similar bodies, by dissolving them in alcohol and making the resulting solution into an emulsion, could not be followed owing to the manner in which the preparation was to be administered, and as jalapin is practically insoluble in glycerine, a simple solution was out of the question. On using the sapo jalapæ of the German Pharmacopœia—made by dissolving 4 parts each of Castile soap and jalap resin in 8 parts of alcohol and evaporating to 9 parts—not more than an equivalent of 2 grains of jalap resin could be got into a fluid dram of glycerine without increasing the viscosity of the liquid to such an extent that it did not run easily from the syringe. Bearing in mind a paper on the use of resin soap as an emulsifying agent read by Mr. Collier, of Guy's Hospital, at an evening meeting of the Pharmaceutical Society in March, 1890, it struck me that, as most resins dissolve in alkaline solutions, forming soaps, jalap resin would, when similarly operated on, behave in like manner and moreover the soap formed would act as an emulsifier to any of the constituents of the resin not saponifiable. Reference to "Pharmacographia" eliciting the fact that jalap resin was soluble in alkaline solutions I put the idea into practice, but had to abandon the use of potassic or sodic hydrate for the purpose in consequence of the difficulty there was in obtaining a neutral soap solution. Finally, by using solution of ammonia as the saponifying agent, and evaporating the resulting liquid after the addition of a little glycerine, I obtained a solution which was quite neutral, containing 6 grains of jalapine to the fluid dram and capable of dilution with water in any proportion without precipitation of the resin. The manner of working was as follows:—

Three hundred and eighty-four grains of jalapin (insoluble in ether) were mixed with 3 oz. of strong solution of ammonia and allowed to stand, with occasional shaking, for two days. The resulting solution was placed in a water-bath, 2 oz. of glycerine were added, and the whole evaporated, with constant stirring, until ammoniacal fumes were no longer given off, the liquid being made up when cold to 8 fluid oz. with glycerine. On trial in the Liverpool Royal Infirmary this preparation was found to be both active and reliable. Subsequently I made in a similar way a series of solutions containing respectively resin of scammony, podophyllin, and aloin, all of which turned out satisfactorily. Guaiacum resin gave a solution which deposited a good deal on standing; the supernatant liquid, doubtless ammonium guaiacate, was found useful as an addition to gargles and gelatine throat-pastilles. In publishing this note I wish to draw attention to a method which I believe is capable of extended application in making liquid preparations of drugs which owe their activity wholly or in part to resins or resinoid bodies—such, for instance, as cascara sagrada and podophyllum.

Trade Notes.

DAN RYLANDS (LIMITED) have been awarded a diploma of honour with gold medal at the Isle of Man International Exhibition for soda-water machinery.

MR. EUGEN DIETERICH, the proprietor of the paper and chemical works at Helfenberg, near Dresden, has given his son Hans the right to sign for the firm by procuration.

THE German Institute for the Chemical Treatment of Gold and Silver (Gold- und Silber-Scheide Anstalt), in Frankfort-on-Main, has made a net profit for the year ending June 30 of 1,613 770m., out of which 15 per cent. dividend will be paid to the shareholders.

IN our report of the exhibits at Kimberley the fine show of Messrs. Evans, Sons & Co., of Liverpool was not mentioned, but we hear that the firm's lime-juice stand, where free tasting samples of the Montserrat products are given away, is quite a feature of the exhibition.

MESSRS. POTTER & CLARKE, of Raven Row, Artillery Lane, send us a copy of a "Universal Herbal Annual" published by them for sale at one penny. It is exceedingly well compiled from a herbalists' point of view, as it shows the herb-treatment of all ordinary complaints, and contains many interesting articles. Chemists and druggists who make the herb-trade a speciality will do well to sell this little book.

THE *New England Grocer* states that Messrs. Morse Brothers, proprietors of the "Rising Sun" stove-polish, which is advertised in this journal by their London agents, Messrs. C. Chancellor & Co., of Charterhouse Buildings, sent out recently to two customers in the West no less than twenty-three car loads of their stove-polish. Each car contained 400 gross of 10-cent packages, or 15 tons; the whole of the two consignments totalling 9,200 gross, or 345 tons.

MARRIAGE.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

HOBBS—MARSHALL.—On October 24, at St. Mary's, Beverley, by the Rev. C. J. Barry, Harry Hobbs, chemist, of Hyde Park Corner, Leeds, to Rose Emily, daughter of Councillor Marshall, chemist, of Beverley and Market Weighton. No cards.

DEATHS.

ATMORE.—On October 11, George Atmore, pharmaceutical chemist, Lynn. Aged 70.

BARKER.—On October 19, William Robert Barker, pharmaceutical chemist. Aged 72. Mr. Barker had been a member of the firm of Savory & Moore for the past forty-five years.

BISHOP.—On October 16, Robert Bishop, pharmaceutical chemist, Eye. Aged 83. Mr. Bishop was one of the founders of the Pharmaceutical Society.

KENDALL.—On October 12, Robert D. Kendall, chemist and druggist, Sowerby Bridge. Aged 56.

KENRICK.—Mr. Fredrick Wm. Kenrick, for many years a chemist and druggist, of High Street, Horncastle, died a few days since. Mr. Kenrick was the oldest Freemason in the county, his age being 81.

MORTON.—Mr. Samuel Edward Morton, chemist and druggist, Broadway, Roath, Cardiff, died very suddenly on Wednesday morning. Deceased went to bed on Tuesday night in apparently his usual health, but at 2 o'clock in the morning he was taken seriously ill, and his wife, becoming alarmed, went for Dr. Griffiths, but before that gentleman arrived Mr. Morton had ceased to breathe.

PREVETT.—On October 12, John Prevett, pharmaceutical chemist, Sheffield. Aged 70.

NEW COMPANIES.

ANGLO-AMERICAN HORSE AND CATTLE FOOD AND MEDICINE COMPANY (LIMITED)—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on business as dealers in all kinds of chemical, vegetable, natural, and other substances used in certain condiments and food for cattle, poultry, and dogs. The first subscribers (who take one share each) are: T. Hock, 8 Pancras Lane, E.C., solicitor; E. W. Benwell, 5 Grayhurst Road, Dalston, N., clerk; R. K. George, 1 Great Tower Street, E.C., clerk; C. Olding, 18 Forburg Road, Stoke Newington, clerk; W. E. Swan, Neasden, clerk; G. L. Harneford, 37 Wellington Street, Woolwich, clerk; and H. E. Smyth, 116 Peckham Rye, traveller. Registered without articles of association.

C. F. MARSDEN & CO. (LIMITED).—Capital 1,000*l.*, in 1,000 1*l.* shares. Objects: To purchase or otherwise acquire and carry on the business of dispensing chemists, patent-medicine vendors, drug merchants, and general storekeepers, now or lately carried on under the name or style of W. Pickles, at the top of Neanwood Street, Camp Road, Leeds. The first subscribers (who take one share each) are:—Charles Frederick Marsden, 3 Leopold Terrace, Leeds, general merchant; Annie Marsden, 3 Leopold Terrace, Leeds, wife of C. F. Marsden; J. William Carley, Woodhouse Lane, Leeds, boot manufacturer; Ralph Dunn, Headingley, Leeds, draper; Edward Teal, 5 Louis Street, Leeds, draper; T. W. Jackson, 49 Louis Street, Leeds, oil and colour merchant; Walter Pickles, Batley Carr, Dewsbury, chemist. The business of the company shall be carried on by C. F. Marsden, as managing director, so long as he chooses to hold that office. Qualification and remuneration not stated. Registered office: Neanwood Street, Camp Road, Leeds.

BERKEFELD FILTER COMPANY (LIMITED). — Capital 20,000*l.*, in 1*l.* shares. Objects: To acquire the goodwill of the business carried on by A. Haacke, at 121 Oxford Street, London, under the style of the Berkefeld Filter Company, and to carry on business as manufacturers and sellers of filters and filtering apparatus and appliances. The first subscribers are:—R. Baelz, 14 St. Mary Axe, E.C., merchant, 250 shares; C. T. Kingzett, Amhurst Park, N., consulting chemist, 250 shares; A. Haacke, 121 Oxford Street, London, 250 shares; C. Lauer, Kieselguhr Wharf, Homerton, N.E., 250 shares; E. Wollake, Royal Exchange Buildings, underwriter, 250 shares; K. Hebbeler, 149 Houndsditch, E.C., chemist, 60 shares; and E. Peake, 83 Westbourne Park Villas, W., clerk, 1 share. There shall not be more than five nor less than two directors, and the first are: R. Baelz, C. T. Kingzett, and A. Haacke. Qualification, 250*l.* Remuneration, 50*l.* per annum each, and, in addition, 10 per cent. of the net profits after payment of a dividend of 5 per cent., such additional remuneration to be divided amongst them as they determine.

SCIENTIFIC MYSTERIES.

CHEMISTS are advised to stock and show this book in anticipation of the winter evenings. It contains particulars of 200 chemical and other experiments, is freely illustrated, and is the cheapest, most comprehensive, and most clearly described collection of experiments and illusions ever offered to the public.

It sells at 1*s.*, and we supply it in one-dozen parcels with show card for 8*s.* 6*d.* It may be obtained at the same price from the following firms—

Ayrton & Saunders, 149 Duke Street, Liverpool
Barclay & Sons (Limited), 95 Farringdon Street, E.C.
Bleasdale, Wm., & Co., York
Edwards, Wm., & Son, 157 Queen Victoria Street, E.C.
Evans, Lescher & Webb, 60 Bartholomew Close, E.C.
Evans, Sons & Co., 53 Hanover Street, Liverpool
Ismay, John, & Sons, Newcastle-on-Tyne
Maw, S., Son & Thompson, Aldersgate Street, E.C.
May, Roberts & Co., 9 Clerkenwell Road, E.C.
Newbery, F., & Sons, King Edward Street, E.C.
Thompson, John, Hanover Street, Liverpool
Woolley, James, Sons & Co., Manchester
Wyleys & Co. (Limited), Coventry

The advantage of stocking and selling this book is that it encourages and developes a new and profitable business in chemicals and chemical apparatus.

Business Changes.

MR. PHILIP HOLMES has acquired the business lately carried on by Mr. McCreath at 39 High Street, Margate.

MR. F. W. WILBY has removed his business from 164 Belgrave Gate, Leicester, to 83 Upper Conduit Street, Leicester.

MR. J. WALKER, of Upper Brighton and West Kirby, Cheshire, has opened a branch at Wallasey, in the same county.

MR. HERBERT RAY, chemist and druggist, 12 Cecil Square, Margate, has removed his dental surgery to that address.

THE business carried on for many years by the late Mr. Gabriel French, chemist, at High Street, Chatham, has been purchased by Mr. George Venables, son-in-law of the former proprietor.

MR. DAWSON, late of the Tollcross branch of the Scottish Drug Depôt (Limited), has been appointed general manager in succession to Mr. Mackie. Mr. Dudgeon has undertaken the management of the Tollcross branch.

MR MITCHELL PARKER, from Messrs. Cooper & Co.'s, Kensington, is fitting up a pharmacy at Crouch End Hill, N. The shop is in a new block of buildings close to the Broadway, and nearer to Crouch End Station than Mr. Bird and Mr. Clark, the other chemists of the district.

THE partnership existing between John Martin and Wm. Charles Glover, druggists and drysalters, Caves Road, St. Leonards, and trading under the title of Martin, Glover & Co., has been dissolved by mutual consent. The business will in the future be carried on by John Martin.

TRADE-MARKS APPLIED FOR.

ANY person who has good grounds of objection to the registration of any of the following marks should *at once* communicate with Sir Reader Lack, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(*From The "Trade Marks Journal," October* 19, 1892.)

Device of jumping clown; for chemical substances used in medicine and pharmacy. By M. A. Lilly, trading as Mayfield, Lilly & Co., 35 Colston Street, Bristol. 165,915.

Device of ancient vase, showing figures thereon; for mineral and aërated waters. By Copeland & Wilson, Portland Works, Jasper Street, Hanley. 165,967.

Device of country maid carrying clothes, and words "BETTER STILL"; for perfumed soap. By J. Watson & Sons, Whitehall Soap-works, Leeds. The essential particular is the device.

(*From the "Trade Marks Journal," October* 26, 1892.)

Signature of applicant; for ointments or dressings for veterinary purposes. By R. C. B. Cave, Barton Court, Colwall, near Malvern. 166,679.

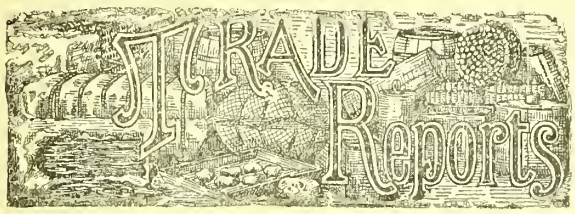
"HIRE'S ROOT-BEER," and signature of applicants; for a medicated beverage. By the Charles E. Hire's Company, 117 Arch Street, Philadelphia, U.S.A. The essential particular is the fac-simile signature. 164,517.

Device of rocks and waterfall, and wording; for seidlitz powders. By H. and J. Sharp, trading as H. Sharp & Son, Bourn Works, Burley Road, Leeds. The essential particular is the device. 165,634.

"PSONAL"; for a medicine for human use. By L. T. Ashwell, Natal House, Hadlow, Kent. 166,974.

Device of cherub sitting on foliage and corn-ears, and "DR. THEINHARDT'S INFANTS' FOOD"; for food for infants. By Peter Reuss, care of Sorenson & Co., 38 Great Tower Street, E.C. The essential particular is the device. 166,614.

"PYRNOLRHM"; for a toilet preparation. By H. Foster & Co., 34 Clements' Lane, London. 165,942.



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

The London Markets.

42 CANNON STREET, E.C., *October* 26.

The Ash Percentage of Kamala.

Mr. Theodore Waage contributes to the *Pharmaceutische Centralhalle* a paper on the purity of kamala, which the last edition of the German Pharmacopœia allows a maximum of 6 per cent. of ash after incineration. Mr. Waage has investigated a large number of samples of commercial kamala, and has found that kamala as imported always contains over 6 p. c. of ash, but that by means of sifting it a drug can be obtained which will yield from 5 to 6 per cent. of ash, but only in very rare cases. According to Flückiger, a sample of kamala which was taken from the capsules sent to him from Java gave 1 287 per cent. of ash—a statement which to some extent supports the assertion of Mr. Waage that pure kamala should not yield more than 1½ per cent. of ash. Mr. Waage calls attention to the large proportion of chaff and pieces of broken capsule which are usually found in commercial kamala, and which average fully 25 per cent. of this total rate. Besides this there is always a considerable admixture of sand obtained in the drug as it is imported. Mr. Waage thinks that the reason why the commercial kamala does not come up to the ash standard prescribed for it is that it is subjected to a certain treatment in India, where the drug is used for dyeing, and where, therefore, the intensity of its colour rather than its medicinal efficacy determines its value

The Tokmari seed

In the *Indian Agriculturist*, Assistant-Surgeon Asutosh Ghose writes a paper on Tokmari-seed, which he thinks would probably become an article of some commercial importance if its medicinal value were better known. Tokmari-seeds are used in the form of a poultice as a remedy in cases of ulcers and inflammations, and are said to have given excellent results at the Campbell Medical Hospital in Calcutta, and other similar institutions. The Tokmari plant (*Lollemantia* Royleana, vel *Dracocephalum* Royl Benth) is a small annual, of the N.O. *Labiatæ*. It grows wild in the Punjaub and is said to be cultivated in Behar. The word "Tokmari" is a corruption of "Tukhm-balanga," the Persian name of the seed. It does not appear that it ever received a Sanskrit name, or that it ever found a place in the Sanskrit Pharmacopœia. It has, however, been favourably mentioned in "Talif Sharif" and other Hakimi works, from which it is to be inferred that it was first introduced in the palmy days of the Mahomedan emperors. When soaked in water the Tokmari-seeds swell up into a jelly, in which form they are used in making sherbets. The jelly is also sometimes strained through a piece of muslin, and the mucilaginous portion thus separated is mixed with water. Taken internally, the mixture acts as a sedative on the mucous membranes of the respiratory passages, intestines, and bladder, and as a diuretic. It is slightly astringent, and is sometimes prescribed by native physicians in bronchitis, catarrh, diarrhœa, and dysentery, as also in the diseases of the urethra. The seeds are also considered useful in palpitation of the heart, and it relieves the after-pains of parturition. There is at present no regular trade in this article, only a small quantity being annually brought to Calcutta, and sold at 5r. or 6r. per maund. Arrangements have been made, however, for sending samples to Europe for experimental trial.

The German Export Drug Trade.

The Secretary of the Frankfort-on-Main Chamber of Commerce has sent out circulars of inquiry to the merchants and manufacturers of his district, asking their opinion upon points affecting their particular branches in connection with the renewal of the commercial treaties between Germany and Russia, Roumania, Spain, Portugal, and the South American Republics. Among the replies received are a large number from druggists and chemical-manufacturers. The suggestions have been submitted to General von Caprivi.

Suggested Monopolisation of the Bergamot-oil Trade.

The British Consul at Naples is responsible for the statement that "Reggio is the only place in the world where the bergamot-tree can be cultivated with profit, and as the essential oil is absolutely necessary for the manufacture of numerous perfumes, medicinal preparations, &c.," he is of opinion that it "offers a good chance to enterprising English firms to make a highly-paying business of it by getting the monopoly of the same. This can be easily done by simply buying up from the producers themselves all the quantity they extract. A work of this kind would, undoubtedly, give back to this product its former price, which, before it passed into the hands of thousands of small traders, who now make a shameful use of it by mixing it with 10 parts of foreign matter, was sold at 1*l* per every 12 oz. The same might be practised with regard to lemon-juice, which is also, to a great extent, a speciality of this district. The infection of the blight, which last year damaged a considerable number of bergamot-trees, having greatly diminished, the crop has been more abundant than the preceding year, and better results are anticipated for the coming season." So far as we can discern the sense of this rather unclassical English, the consul advises a British firm to come to Reggio and corner the bergamot-oil trade. Apart from the question whether instigation to such doubtful tricks of trade is not beyond the province of a consular report, we question whether any single foreign house which, relying merely upon its capital strength, plunged into a buying-up contest with the "thousands of small traders" would not come out at the little end of the horn. And what proof has the consul for asserting that Reggio is the only place in the world where the bergamot-tree can be cultivated?

BALSAM (TOLU).—There has been a fair demand for this drug, and it is not possible now to obtain fair quality below 1*s.* 2*d.* per lb.

BLEACHING POWDER.—Dull of sale and easier. The spot quotation is now 8*l* 10*s*. Liverpool offers at 7*l.* 15*s*, f.o.b., for prompt, or at 7*l.* 2*s.* 6*d.* on rail for 1893. The price on Tyneside is 7*l.* 10*s.*, f.o.b.

BROMINE SALTS.—As foreshadowed in our last issue, the English manufacturers of bromides fixed their new scale of prices on Monday morning, when they announced the following quotations: *Bromide of potassium*, from 1*s.* 6½*d.* to 1*s.* 7½*d.* per lb.; *Bromides of sodium* and *ammonium*, at 1*s.* 10½*d.* to 1*s.* 11*d.* per lb., according to quantity. This is a further advance of 4½*d.* per lb all round. The American bromine producers are now, under the terms of the new agreements, quite cut off from the European market, and the general opinion among druggists here appears to be that we have seen the last of the low prices for the present.

CUTCH.—The market is firm. Privately 30*s.* per cwt. has been paid for "Star B," and now holders ask 31*s.* per cwt. At the auctions on Tuesday 232 boxes were partly disposed of at 25*s.* 6*l.* per cwt. for soft common tablets.

GALLS (CHINA).—At auction on Tuesday 10 cases of ordinary China galls sold at 51*s.* 6*d.* per cwt.

GUINEA-GRAINS.—Sales are reported from Liverpool at 22*s* 6*d* per cwt.

LIME-JUICE.—As a result of the accumulating stocks importers have accepted lower prices and a large business has been done this week, it is said, at from 10*d.* down to 8*d.* per gallon for fair Jamaica. Prices then rose again to 11*d.* per gallon, at which figure the last transactions were put through. The total sales from first hands amount to about 500 casks.

OIL (OLIVE).—Holders in London are firm, 38*s.* being asked for *Spanish* oil and 36*s.* for *Levantine* and *Mogadore*, but there is not much business passing. In Liverpool the market is also firm but quiet, with sales at the rates of 37*s.* for fine *Spanish*, 35*s.* 6*d.* for *Messina*, 35*s.* 6*d.* to 36*s.* for *Candia*, and 34*s.* 6*d.* to 35*s.* per cwt. for *Syrian* oils. In Spain the crop estimates are being reduced as the season advances, and the total output from that country is not now expected to exceed two-thirds of a good crop. In the Seville district, however, the prospects are very good. The olive yield in the Levant and the Grecian Isles is likely to be a very poor one in many quarters; indeed, it is almost an entire failure. In the Ionian Islands the crop is also poor, and in Italy the harvest is progressing very badly.

OILS (ESSENTIAL).—Sales of *Oil of anise* have been made on the spot at as high a price as 6*s.* 3*d.* per lb., and for arrival up to 5*s.* 7*d.* per lb. c.i.f. terms.

OPIUM.—Our mail advices from Smyrna (dated October 15) are as follows:—Since October 12 nothing has been done in opium, partly on account of the Jewish holidays and partly because of the tenacity with which the holders stick to their demand of a penny a pound above the present market prices. They base their firmness on the reports from the interior announcing continued absence of rain, whereby the sowing of the autumn seed is retarded. The arrivals here since the beginning of the season are 3,025 cases, against 2,400 cases in 1891. There is, however, nothing alarming in these reports up to the present time. The purchases for the Dutch Colonial Department still continue; up to 7*s.* 6*d.* per lb. has been paid for opium suitable for this purpose, but the Dutch tests are becoming so stringent that hardly fifty cases have been approved of during the first half of October.

POTASH SALTS.—*Chlorate* has advanced and is now firmly held at 7¾*d.* f.o.b. Liverpool for prompt delivery. Second-hand holders have done business at 6¾*d.* per lb. f.o.b. for January 1893 delivery. *Permanganate* fairly steady, with business at the convention prices. *Bichromate* may be had at 4⅝*d.* per lb. British refined *Saltpetre* is quoted at 20*s.* 9*d.* to 21*s.* 9*d.* per cwt. according to packing: German at 20*s.* 6*d.* to 21*s.* 3*d.* per cwt.

QUICKSILVER remains unaltered at 6*l.* 10*s.* from the importers, or 6*l.* 8*s.* 6*d.* per bottle from the second-hand.

QUININE.—In the latter part of last week small sales were made at 10*d.* per oz. for second-hand German bulk on the spot, and at 10½*d.* per oz. for March delivery. The Pelletier Company write us from Paris that the present price of their brand is 1*s.* 4½*d.* per oz.

SHELLAC.—Last week the market closed quietly with small sales of TN orange lac for November delivery at 86*s.* per cwt. On Monday, however, a better demand showed itself, and prices rose (with sales of about 1,000 cases) to 88*s.* 6*d.* for November TN, and 88*s.* for December, ditto. At the weekly auctions only 502 cases of all kinds were offered. Holders showed much firmness, and only about 243 cases were disposed of at an advance of 1*s.* on orange and button, and of 2*s.* on garnet lac. The following prices were realised: *Second orange*—Curly reddish and cakey to fair bright flat, 84*s.* to 86*s.*: *Garnet*—fair free but curly to good AC unworked, 75*s.* to 77*s*: *Button*—good but cakey unworked firsts, 96*s.* to 97*s.*; fine seconds, 90*s.*; dark to good thirds, 76*s.* to 80*s* per cwt. Since the auctions the market has been quiet, with very little business.

SODA SALTS.—*Soda crystals* are dull of sale, at 66*s.* from the London makers, or 67*s* 6*d.* landed from the Tyne. The Newcastle price is 57*s.* 6*d.* f.o.b., or 65*s.* ex ship London. *Caustic soda* steady at 10*l.* 5*s.* for 70-per-cent., here or in Liverpool; 9*l.* 2*s* 6*d* for 60-per-cent., or 11*l.* 10*s.* for 76 to 77-per-cent., on the Tyne. For 1893 delivery a reduction of 20*s.* per ton is made. *Bichromate* is quoted at 3¾*d.* per lb. *Nitrate* firm at 8*s* 7½*d* to 9*s.*, according to quality. A considerable business has lately been done in cargoes off the coast.

SPICES.—At the weekly auctions on Wednesday all spices were firm, with the exception of white Singapore pepper and arrowroot, for both of which lower prices were taken. *Black pepper* was somewhat dull of sale, at 3½*d.* to 3⅝*d.* per lb. for grey to good fair Singapore. Four hundred bags Singapore *White pepper* sold at 4⅞*d.* to 5*d.* per lb., for dull to fair, and of Penang pepper a parcel realised 4 3/16*d.* per lb. *Pimento* remains firm, with sales of ordinary to fair at 3*d.* to 3⅛*d.* per lb. Cochin *Ginger* is very firmly held, and sells at full prices—good native cut at 68*s.*, and bold cut at 89*s.* per cwt. *Nutmegs* are firm, and slightly higher for bold kinds, while *Mace* remains dull of sale. Zanzibar *Cloves* are dull of sale, only a few lots of dark description finding buyers at 2¾*d.* per lb. Fair to good picked Penang cloves are selling at 7*d.* to 9*d.* per lb. There has been a strong demand for *Cinnamon*, and privately prices have been paid which show an advance of fully 1*d.* per lb. upon the last public auction rates.

TURMERIC.—The demand has been better, with sales of *Bengal* root at 22*s.*; and ordinary bulby to fair bright mixed China finger at 16*s.* to 18*s.* 6*d.* per cwt. At auction 73 bags split *Cochin* bulbs sold at from 7*s.* 3*d.* to 8*s.* 9*d.* per cwt. for rough to fair bright. A parcel of 300 bales bright bulby *China* finger was bought in at 21*s.* per cwt.

Thursday's Market News.

42 CANNON STREET, E.C., *October* 27.

London. The drug and chemical markets of this city continue to be fairly active, and prices generally are continuing their upward course. At to-day's drug-sales a very considerable proportion of the goods offered sold at improved rates. The following are the principal alterations:—Higher: Socotrine and Curaçao aloes, buchu, chamomiles, Canada balsam, jalap, lime-juice, star-anise oil, Siam and Sumatra benzoin, musk, cassia fistula, Japanese peppermint oil, menthol, oils of lemon and bergamot, fine guaiacum gum, Jamaica beeswax, vanilla, squills, and Jamaica sarsaparilla. Lower: Peru balsam, fine Tinevelly senna, ipecacuanha, and gum myrrh. In fine chemicals the chief feature of the week has been a heavy advance in bromine salts. Quinine is a shade easier. In other articles we may mention that Japan wax, cutch, chlorate of potash, linseed oil, and antimony are higher; while gambier, petroleum, and white Singapore pepper are offering at easier rates. Bleaching-powder is also cheaper. Shellac is irregular, but closes lower. The Bank rate is unchanged, at 3 per cent. Bar silver is worth 39 1/16*d.* per oz. The Calcutta exchange is 1*s.* 3 31/32*d.*, Bombay 1*s.* 3 15/16*d.*

New York. Our correspondent, writing under date of October 19, states that the festivities attendant upon the Columbian Quarcentenary Celebration in that city had the effect of restricting business to a certain extent for the previous week. Notwithstanding this, however, the tone of the market remained firm, and there was a general upward tendency noticeable, which increased during the latter part of the week and the first part of the current week. The most interesting news of the week is the announcement of an agreement between the conflicting bromine interests. The details of the agreement are not yet made public, but it is reported that the stocks of foreign bromides held here unsold will be reshipped, and the market here left to the control of the domestic manufacturers. As a consequence *Potassium bromide* has been advanced to 27c. to 28c. per lb. in bulk, *Sodium bromide* to 32c, and *Ammonium bromide* to 34c. Western holders are very firm on *Senega*, and ask the equivalent of 61c. laid down; on the spot, however, 57½c. will buy in a small way, but the stiff figures have shut off the export demand, and no business is doing. *Mexican sarsaparilla* continues to decline, and is jobbing at 8½c. to 9c. spot, while forward deliveries are offering, in round lots, at 8c. Forty-six bales arrived last week from Vera Cruz, and it is reported that further liberal supplies are in sight. *Jalap*, too, is in full supply, 83 packages having come to hand last week. The jobbing demand is fair at 30c. to 35c., and no large

business has come to light. Mexican *Vanilla beans* are very firm at a marked advance, with large sales at the advanced prices, which range from 325c. for cuts up to $10 for prime frosted beans. Sales of 4,500 lbs. of Angostura *Tonquin beans* are reported at $2.75 for strictly prime quality. *Jaborandi leaves* are scarce at the moment, and 40c. is asked in some quarters. *Damiana leaves* are also higher, with sales at 18c. and 22c. to 25c. wanted for further supply of good leaves. Sales of *Kava kava* root are reported at 20c., and 22c. is now asked. California yellow *Mustard seed* has advanced to 6¾c. to 7c., after sales of 300 bags at 6½c. *Citric acid* has been advanced by the manufacturers to 1c. to 45c. in barrels, and 45½c. in kegs, and the citrates have been marked up in sympathy. *Peppermint oil* is quiet and neglected, at $2.65 asked, which is too high for export trade. *Nitrate of silver* has advanced to 54c. to 55½c. *Curaçao aloes* are stiffer, with sales of 100 boxes at 3c. *Opium* is rather weak, but not quotably changed. One holder shaded his price on German *Quinine* the latter part of last week, but on the strength of the bark sales prices stiffened up again, with sales of 150,000 ozs. of B & S at 19c. The consumptive demand is only fair. *Gums benzoin* and *kino* are both stiffer. *Ipecacuanha* advanced to $2.20. *Clove oil* is stiffer, in sympathy with the parent article. *Cumin seed* very scarce and higher.

ACID (CITRIC).—The market is not very lively this week, but quotations remain practically unchanged, 1*s.* 6½*d.* being asked by the makers for B.P. quality, while second-hand holders offer (without guarantee of standard) at 1*s.* 6*d.* per lb. Juice quiet at 21*l.* to 21*l.* 10*s.* f.o.b.

ALOES.—Of *Curaçao* aloes two parcels were offered, and the best lots sold at higher prices, 75*s.* per cwt. for fine bright orange, 31*s.* for fair, and from 15*s.* down to 10*s.* for dark coarse liver. Of *Cape* aloes a parcel of 52 cases sold rather cheaply as compared with the prices that have been paid privately recently—viz., at 23*s.* to 23*s.* 6*d.* per cwt. for good to fine bright hard, 22*s.* 6*d.* to 21*s.* per cwt. for fair to rather drossy, mixed, 18*s.* for ordinary, and 6*s.* 6*d.* per cwt. for a lot consisting of the most part of stones. *Socotrine* aloes are scarce in fine qualities and in small supply. Higher prices were paid to-day—viz., 85*s.* per cwt. for 3 cases fair dry in skins. One keg of ordinary settlings brought 35*s.* per cwt.

AMBERGRIS.—Two lots, together 16 oz., of rather ordinary dark quality sold to-day at from 43*s.* to 60*s.*, subject to approval.

ANISE.—Prices remain high. For 23 bags fair pale *East Indian* 19*s.* 6*d.* per cwt. was paid to-day. Stony *Russian* seed was withdrawn without mention of price.

ANISE (STAR).—The quotation we now hear for arrival is 89*s.* per cwt. c.i.f. terms, which is a fresh advance since last week.

ANNATTO.—About ¼*d.* per lb. dearer, 52 bags good bright Ceylon selling at 2¾*d* to 3*d.* for good, and 1½*d.* for dull dark quality.

ANTIMONY.—Twenty cases crude Japanese sold to-day at 25*l.* 10*s.* per ton.

ARECA.—Ten bags of fair quality were bought in to-day at 33*s.* per cwt. nominally.

BALSAM (CANADA).—Three barrels of good thick pale balsam were bought in at 1*s.* 6*d.* per lb. A bid of 1*s.* 3*d.* per lb. was refused.

BALSAM (COPAIBA).—Of seventy-three tins *Bahia* copaiba eight sold at 1*s.* 5*d.* per lb. (subject to approval, the limit being 1*s.* 6*d.* per lb.) for fair yellow, and at 1*s.* 4*d.* per lb. for thick dark grey. Eight casks fair thick *Maranham* were bought in at 1*s.* 10*d.* per lb.

BALSAM (PERU).—At to-day's auctions 4*s.* 5*d.* per lb. would have been accepted for fair quality, but no bids were made. Business has been done at reduced prices, holders, it is said, having accepted down to 4*s.* 5*d* per lb. on the spot.

BUCHU.—There were only three packages at auction to-day, and those sold at very high prices—viz., 9½*d.* to 9¾*d.* per lb. for round mixed rather yellowish leaves of good flavour. This marks a fresh advance of 2*d.* per lb. We hear that a consignment is due in about a fortnight, and that part of it has been sold for arrival at low prices compared with those now ruling.

CALUMBA.—Steady of sale, with business at to-day's auctions at the rate of 26*s.* 6*d.* to 27*s.* 6*d.* per cwt. for grey and yellow mixed sorts.

CAMPHOR (CRUDE).—The market remains firm, and business in *Japan* camphor on the spot is reported at 150*s.* to 155*s.* per cwt., and of *China* at 140*s.*, c.i.f., for near at hand. For October–November shipment, however, China camphor offers lower—viz., at 130*s.*, c.i.f. terms. At to-day's sales 140*s.* per cwt. was paid for one tub of good crude Japanese.

CAMPHOR (REFINED).—There is no alteration in the English or German quotations. Eleven cases refined Japanese in cakes were bought in to-day at 1*s.* 7½*d.* per lb.

CANARY-SEED.—The market is steady for all kinds except Barbary seed, of which there have been fairly heavy arrivals, and which may now be had at 78*s.* on the spot. *Turkish* seed is still quoted at 80*s.*, and *Spanish* at 82*s.* 6*d.*

CANNABIS INDICA.—Of 23 robbins, fair greenish tops, 15 sold to-day at 3½*d.* per lb.

CANTHARIDES.—A parcel of 4 cases *Chinese* flies, small to very bold mixed, but rather dark in colour, was brought in to-day at 1*s.* 8*d.* per lb. We believe that 1*s.* 5½*d.* per lb. would be accepted.

CARDAMOMS.—Slow of sale; 139 cases were offered to-day, of which 64 sold as follows:—*Ceylon-Mysore*: Medium long yellow, 1*s.* 8*d.*; small to medium brownish, 1*s.* 5*d.*; small and rather brown round, 1*s.* 4*d.*; small yellow, partly split, 1*s.* 3*d.*; common brown split, mixed sizes, from 1*s.* 1*d.* down to 5*d.* *Ceylon-Malabar*: Medium to bold fair brown, 1*s.* 6*d.*; smaller sizes, 1*s.* 3*d.* per lb. Grey *seeds* realised 1*s.* 5*d.* per lb.

CASCARA SAGRADA.—The market is dull, and no business is reported. Only 2 bags offered to-day, which showed a very woody quality; 45*s.* per cwt. is asked for them.

CASSIA FISTULA.—Eight bags from Dominica, good quality, were offered to-day, and with excellent competition brought the very high price of 26*s.* 6*d.* per cwt.

CHAMOMILES.—*Belgian* flowers are much dearer this week, and several of the agents have received instructions to stop selling. The advance is chiefly in the ordinary and medium qualities, which are from 5*s.* to 7*s.* 6*d.* per cwt. higher. Nothing is now offered below 47*s.* 6*d.* per cwt., and prices run from that point up to 72*s.* 6*d.* per cwt. for finest flowers.

CINCHONA.—The supply of good qualities of flat *Calisaya* bark is becoming very small, and there are a fair number of inquiries. At auction to-day 87 packages were offered, all of very ordinary grey quality. Most of this sold at from 6*d.* to 10*d.* per lb. for medium to fair, and down to 2*d.* per lb. for very dark and damaged. Of *Crown* bark 38 bales partly silvery mixed grey quill were bought in at 1*s.* 4*d.* per lb., for fine bright quill 1*s.* 7*d.* per lb. was refused, and some good lots sold at 1*s.* 6*d.* per lb.

COCCULUS INDICUS is in plentiful supply, but holders are asking somewhat higher prices, 8*s.* 9*d.* being mentioned for fair quality.

COLOCYNTH.—For fair pale partly seedy *Turkey* apple a bid of 11*d.* per lb. was refused to-day, the price being 1*s.* per lb. Two cases broken and very seedy *Spanish* sold at 9*d.* per lb.

CONDURANGO.—The 18-bale lot to which we referred last week, was offered to-day, but it was hardly so briskly competed for as the owners had expected. The price asked is 8*d.* per lb., and five bales sold at that figure, an offer of 7½*d.* per lb. being refused for another lot.

CUBEBS.—Sixteen bags from Batavia, brown and grey mixed berries of somewhat mace-like odour, were bought in at 6*l.* per cwt. to-day. Of another parcel of 15 bags black and blue mixed berries, free from stalk, three sold at 6*l.*; for the remainder 5*l.* 17*s.* 6*d.* was refused.

CUTTLE-FISH.—Thirty packages fair, pale, partly broken bone from Bombay sold cheaply at 2¼*d.* per lb. to-day.

DILL-SEED.—Of 50 bags from Bombay, eight sold at 13*s.* per cwt.

DRAGON'S BLOOD.—Several parcels were placed in sale to-day: one of 7 cases, low, pale bricky, irregularly-shaped slabs, sold without reserve at 32*s.* to 33*s.* per cwt. A parcel of 13 cases fair sticks in reed brought from 5*l.* up to 5*l.* 17*s.* 6*d.*, and some dark East Indian drop realised 46*s.* per cwt.

EPSOM SALTS.—During the last few weeks sulphate of magnesia (said to be free from chloride and showing very fine dry crystals) has been imported from Germany, in competition with the English article. It is sold at lower prices—viz., at the rate of 58*s.* per cwt., c.i.f. terms in bags, with an increase of 10*s.* for 5-cwt. casks, and 20*s.* for cases and kegs.

ERGOT OF RYE.—Of 3 bags ordinary wormy mixed German, 2 sold at 2*s.* 1*d.* per lb. For 4 bags *Belgian*, of medium quality, a bid of 2*s.* 2*d.* per lb. was refused. For good sound *Spanish* 2*s.* 6*d.* per lb. would now be taken, which is a few pence less than was wanted for the same parcel a few weeks ago.

GAMBOGE.—Thirty-three cases were offered to-day, and of these 13 sold at 11*l.* 10*s.* for broken Saigon pipe and cake of good fracture, but very small; 10*l.* 17*s.* 6*d.* for pickings; and 10*l.* 10*s.* for very common ricy pieces.

GENTIAN.—A parcel of 10 bales was advertised for sale to-day, but not offered. It is said to have been sold privately.

GLYCERINE.—The market is very firm, at 43*s.* to 43*s.* 6*d.* per cwt. for double-distilled, s.g. 1 260. Business is reported at both these quotations.

GUINEA-GRAINS.—Ten bags fair and slightly stony, as usual, sold at 25*s.* per cwt. to-day.

GUM ACACIA.—In the face of these resumed shipments from the Soudan buyers stand off rigorously, and most of them will probably not come into the market for large purchases until the price shall again have fallen to 50*s.* or thereabouts. At to-day's auctions several parcels of acacia gum were offered, but the bulk was bought in. Five casks of greyish picked *Mogadore* drop sold at 84*s.* per cwt. A parcel of *Red Sea* gums was disposed of at 10*l.* 7*s.* 6*d.* to 13*l.* 12*s.* 6*d.* for good to fine pale picked; 6*l.* to 8*l.* 5*s.* for yellow ditto; and 6*l.* to 6*l.* 2*s.* 6*d.* for small grey. Yellow sorts from Suez brought 70*s.* to 75*s.*, and clean small siftings, 45*s.* per cwt. A parcel of fine *Cape* gum sold well, with good competition at full prices; fine pale soft dusty sorts, at 92*s.*; fair ditto, rather yellowish, at 61*s.* 6*d.* to 62*s.* 6*d.*; clean white siftings, at 57*s.*; and dusty amber mixed, at 33*s.* 6*d.* per cwt. Large quantities of Soudan gum continue to arrive from Suez.

GUM AMMONIACUM.—Of 22 cases offered to-day, 4 sold without reserve at 36*s.* to 37*s.* for fair almondy block, which shows rather a lower price.

GUM BENZOIN.—Of *Siam* gum 20 cases were offered at to-day's sales, and these were all sold, with exceptionally brisk competition, at an advance of from 3*l.* to 5*l.* per cwt., bringing the prices up to a figure which has not been reached for many years. Very fine medium to bold clean, of somewhat pale almonds, brought 28*l.*; medium ditto, 22*l.*; fair small to medium almonds, free from dust, 12*l.*; fair native picked clean small almonds and grains, 10*l.* 10*s.* to 11*l.*; good orange bright block of small to medium almonds and siftings, 8*l.* 12*s.* 6*d.*; pale coarse siftings, rather dusty, 5*l.* 7*s.* 6*d.* to 5*l.* 10*s.*; dull grey dusty garblings, 65*s.* per cwt. Of *Sumatra* gum a few cases only sold at an advance of fully 5*s.* per cwt; very fine seconds, bright pale centres, slightly dull at borders, 7*l.* 17*s.* 6*d.*; lower ditto, 6*l.* 15*s.* to 6*l.* 17*s.* 6*d.* The stock of this variety is now becoming very much reduced. There was a large arrival of new *Palembang* gum, of which a few boxes of good gummy quality sold at 40*s.* per cwt.

GUM GALBANUM.—Nine packages of the spurious drug usually so called at our drug-sales, imported from Aden in blocky grains, sold at 18*s.* per cwt.

GUM GUAIACUM.—Fine qualities are in demand and considerably dearer, 3*s.* 2*d.* per lb. being paid for a lot of extra fine almondy block; and 2*s.* 6*d.* per lb. for a very good lot. The remainder of the 66 boxes offered consisted of very common quality, which could hardly be called by the name of guaiac, as most of it was bark, stones, and earth. All of this sold at from 2½*d.* to 10*d.* per lb.

GUM KINO.—An offer of 105*s.* per cwt. was refused for a case of good East Indian shown at to-day's auctions.

GUM MYRRH is decidedly lower. Of 55 packages offered to-day 11 sold at from 70*s.* to 80*s.* for dark to good bright sorts, 80*s.* for fine clean siftings, and 38*s.* for dark pickings.

HONEY.—Good *Jamaica* honey is getting scarce, and everything offered to-day sold at 27*s.* 6*d.* to 29*s.* for brown to orange thick. Several parcels of *Australian* honey were partly disposed of.

IPECACUANHA.—Three hundred and five bales of ipecacuanha arrived from Monte Video in one consignment on Friday last, and in addition to this heavy arrival another lot of 200 bales is reported to be on the way and due in the first week of November. Under these circumstances it is not surprising that there was scarcely any bidding whatever at to-day's sales. The brokers bought in their supply at from 9*s.* to 9*s.* 6*d.* per lb. for *Rio* root, and refused an offer of 8*s.* per lb. for a rather lean and somewhat damaged seron, for which 8*s.* 5*d.* per lb is asked. After the sales a bid of 8*s.*, made by an American buyer for a large quantity, was refused. The holders are not disposed, it seems, to accept a greater reduction than about 6*d.* per lb. on the last sale prices. A bale of so called "Brazil ipecac." (*Psychotria emetica*) was offered to-day and bought in. The broker stated that he had sold a similar one at 6*s.* per lb. at the auctions on a previous occasion, but no bid was made now. The root is useless as a substitute for ipecacuanha. We believe that a parcel of 73 bales of this root has recently arrived.

JALAP.—From 1*d.* to 1½*d.* dearer to-day. For two bags good pale quality a bid of 1*s.* 6*d.* was refused; while out of another of 9 bales imported twenty-one years ago, and consisting of rather small pale pieces and partly of chips, 4 bales sold at from 1*s.* 5*d.* to 1*s.* 6*d.* per lb.

KAMALA.—Three cases rather dull unsifted, from Bombay, were bought in at 7*d.* per lb.

LIME-JUICE.—To-day a good demand was manifested, and 15 hogsheads of West Indian were all sold at a slight advance on the prices paid privately this week—namely, 11*d.* for dull and dirty, and 1*s.* 1*d.* per gallon for good pale Jamaica.

MUSK.—In better demand to-day, but also in considerable supply, most of which, however, was sold at an advance of about 5*s.* per oz. on fine first pile, and about 3*s.* on third-pile *Tonquin* musk. Of 13 packages first pile 4 sold at 67*s.* 6*d.* per oz. for small to bold fine thin skin, blue and brown underskin, well-trimmed but somewhat damp, and 60*s.* for old-fashioned small to bold dry and fairly trimmed. Fourteen tins of third-pile pods were all sold at 43*s.* 6*d.* for good small to bold blue skin pods, 30*s.* to 31*s.* for fair old-fashioned somewhat damp, and down to 7*s.* 6*d.* (subject) for very common. Of *China cabardine* musk 7 tins were offered, but there were no bids at 13*s.* per oz. For somewhat dry and unsightly *Yunan* pods a bid of 27*s.* was refused.

OILS (ESSENTIAL).—A parcel of newly-imported essential oils, distilled in Spain, sold at to-day's auctions without reserve at 2*s.* to 1*s.* 9*d.* per lb. for *rosemary* and 1*s.* 8*d.* to 2*s.* 1*d.* per lb. for *red thyme*. A case of *pennyroyal* oil was bought in at 5*s.* 6*d.* per lb. nominally. *Eucalyptus* oil is very firmly held and in good demand. At to-day's sales several parcels of Australian were bought in at 3*s.* per lb. Of *ylang-ylang* a few bottles appeared to be sold at 12*s.* per oz. Oil of *lemon* and *bergamot* are reported dearer from Italy, but no definite prices are yet given for new crop oils. For *citronella* oil offered to-day (35 cases) 1*d.* per oz. is asked. A few cases of unworked oil of *cassia* sold at 3*s.* 3*d.* per lb. Japanese oil of *peppermint* is dearer, with sales on the spot at 6*s.* 6*d.* per lb., while holders now ask 6*s.* 9*d.* For shipment 6*s.* 3*d.* c.i.f. has been paid, and 6*s.* 6*d.* c.i.f. is now asked. *Menthol* crystals are quoted at 10*s.* 6*d.* to 10*s.* 9*d.* per lb. to-day. American peppermint oil (HGH) is at 12*s.* per lb. at present.

OPIUM SALTS.—At to-day's auctions 14 tins, each 400 oz. of *Hydrochlorate of morphia*, manufactured in India, were offered on behalf of the Indian Government: they sold very cheaply at 2*s.* to 2*s.* 1*d.* per oz. Two tins, each of 480 oz. *Codeine*, of the same manufacture, also sold at the low price of 4*s.* 10*d.* to 4*s.* 11*d.* per oz.

QUININE.—Seven cases, of 10 100-oz. tins each, *B&S* quinine sold to-day at 9¾*d.* (one lot at 9⅞*d.*) per oz., which is about ¼*d.* per oz. below the price quoted in the market. The market closes very quiet, without either speculative or trade buying to any considerable extent.

RHUBARB is slow of sale and generally easier for all kinds except high dried, which realised fairly good prices. Eighty-three cases were offered at to-day's auctions, of which 32 sold as follows:—*Shensi*, flat medium to bold fine rough bright coat, and nearly picky in fracture, 2*s* 4*d.*, medium to bold fair coat, round pinky grey fracture, 1*s.* 11*d.*; small to medium coat of good fracture, flat, 1*s.* 10*d.*; ditto flat, rather rough coat and grey fracture, 1*s.* 5*d.*; round small to medium partly rough coat, three-fourths pinky, one-fourth dark fracture, 1*s.* 4*d.* to 1*s.* 5*d*, and good pickings, 1*s.* 1*d.* per lb. *Canton* medium to bold, fair coat three-fourths pinky, one-fourth dark fracture, slightly wormy round 1*s.* 4*d.*; ditto round and flat mixed, of all sizes, 1*s.* 2*d.* to 1*s.* 4*d.*; medium round, three-fourths pale pinky, one-fourth dark, 1*s.* 3*d.* per lb. *High dried*, small to medium fair pinky fracture, 1*s.* 4*d*; smaller ditto, 1*s.* 3*d*; ordinary small, 9½*d.* per lb. We have heard it stated that the *Bokhara*, which was recently lost on the Chinese coast, had about 200 cases of rhubarb on board.

SARSAPARILLA.—Of a parcel of 29 bales *Lima Jamaica* root, 14 sold at from 1*s.* 1*d.* to 1*s.* 2½*d.* per lb. for first-class, and at 10*d.* to 11*d* per lb. for badly-damaged root. *Grey Jamaica* sold at 1*s.* 7*d.* per lb., which is dearer.

SENEGA.—Bids of 2*s.* 6*d.* per lb. were refused to-day for good bright root. The owners would take 2*s.* 9*d.* per lb.

SENNA.—Of *Tinnevelly* senna 389 packages were offered to-day, which were mostly in first hands. With few exceptions, the whole of this was sold at prices hardly up to those of last sale. Fine qualities were decidedly easier, and for medium and ordinary grades there was a tendency towards lower rates. The prices realised were, for very low dark and stalky to small yellow, 1½*d.* to 2¾*d.*; ordinary to medium yellow and grey, 3*d.* to 4*d.*; fair small to medium greenish, 4¼*d.* to 6½*d.*; good bold green mixed to fine, from 7*d.* to 1*s.* 2*d.* per lb. *Pods* are neglected, and sell cheaply at from ¾*d.* to 2¾*d.* per lb. Of *Alexandrian* senna some fine pale pods brought 2¼*d.*; small to medium green leaf 8*d.*; and broken greyish siftings, 4¼*d.* per lb.

SQUILLS.—Higher at to-day's sales. For good pale quality 5*d.* per lb. is wanted (4½*d.* being refused), while fair sold at 3½*d.* per lb.

SUGAR OF MILK.—Good quality is offering at 62*s.* 6*d.* to 65*s.* per cwt.

TEA.—The market for Congous is very firm this week, and nothing but the merest rubbish can be bought under 6*d.*, though there is no further definite advance to be noted. On the other hand, there has been a further move upward on the part of Indians and Ceylons, the heavy Indian sales of the week going off very briskly with strong competition and at full rates, for teas under 10*d.* especially. The terminal market is dearer again, and future months are up to 3¾*d.* per lb.; spot a little lower. Ceylons show a greater advance than Indians, and practically nothing can be bought under 7*d.* per lb. This is, of course, not a very high price for leaf Ceylon, except in comparison with recent low rates, and the small quantity on the water to arrive warrants the opinion that Ceylons will not be cheaper yet.

TONQUIN BEANS.—Foxy Pará beans sold at 1*s.* 4*d.* per lb. to-day, which shows rather an improvement in value.

VANILLA.—A fairly large supply of *Mauritius* and *Seychelles* beans sold to-day at an advance of 6*d.* to 9*d.* per lb.; fine crystallised, 7½ to 8 inch, 16*s.* to 19*s*; slightly crystallised, 6½ to 8 inch, 11*s.* to 14*s.* 6*d.*; fair to good chocolate, 4 to 8 inch, 7*s.* to 13*s.* 6*d.*; ordinary to fair brown, from 4*s.* 6*d.* to 8*s.* 6*d.* per lb.

WAX (BEES').—Of Jamaica only a few packages were offered, which sold, with very good competition, at an advance of about 5*s.* per cwt.—fine yellow, 7*l.* 12*s.* 6*d.*; grey mixed to good red, from 7*l.* to 7*l.* 5*s.* For Zanzibar wax, dark and grey mixed, 5*l.* 2*s.* 6*d.* to 5*l.* 5*s.* was paid; bright orange coat realised 6*l.* 15*s.*; and a fair quantity of Madagascar sold at from 100*s.* to 107*s.* 6*d.* for brown to good yellow, which shows a steady price.

WAX (JAPAN) is higher. On the spot 39*s.* per cwt. has been paid for good pale squares, and 35*s.*, c.i.f., for shipment.

THE SMYRNA OPIUM MARKET.

(*Telegram from our Correspondent.*)

SMYRNA, Wednesday night.

OUR market is firm, and prices are well sustained. The sales this week amount to 40 cases of manufacturing opium, of usual quality, at the parity of 6*s.* 3*d.* to 6*s.* 5*d.* per lb., f.o.b. here, and of 50 cases of *Karahissar*, at the parity of 7*s.* 4*d* per lb., f.o.b.

THE LIVERPOOL MARKET.

BALSAM COPAIBA.—The market has been cleared of cloudy and bright Maranham, and only second-hand parcels are now to be had, at 1*s* 8½*d.* for cloudy and 1*s.* 9*d.* to 1*s.* 9½*d.* for bright. There are indications of even higher prices being asked.

HEMPSEED is advancing, and higher prices are likely in the near future.

HONEY.—Sales of *Chilian* in quantity continue to be made, and the market has been cleared of low grades—third pile fetching 23*s.* Tenth-pile has been selling at 35*s.* 6*d.* to 37*s.* 6*d.*

IPECACUANHA.—Seventy-three bales of so-called ipecacuanha have arrived, but they are not the true variety, and are not likely to affect the market.

OIL (CASTOR).—The steady advance has been maintained on the spot and to arrive. In the former position 2½*d.* to 2 9/16*d.* is now asked. First-pressure *French* is now held for 2⅝*d.*, and second-pressure 2½*d.*

QUILLAIA is in a much firmer position, and the value on the spot has advanced to 17*l.*

SPERMACETI.—Fifty-three boxes of Chilian sold on private terms; and 50 boxes of American, offered at auction, were withdrawn at 1*s.* 4½*d.*

WAX (BEES').—In *Chilian* there has been considerable movement, and the market has been practically cleared of all lots offering—6*l.* 10*s.* grey, 7*l.* yellow, and 7*l.* 10*s.* to 7*l.* 15*s.* for pale.

TO DETECT ALCOHOL IN VARNISHES AND PHARMACEUTICAL PREPARATIONS.—Mr. Ad. Tscheppe suggests that we should put into a test-tube 70 per cent. nitric acid and pour above it the liquid to be tested. In the presence of alcohol there appears a greenish colour, which in a few minutes passes into a brilliant deep emerald. Gradually there takes place a faint evolution of gas, and the characteristic odour of ethyl nitrite is recognised.

THE WESTERN CHEMISTS' ASSOCIATION (OF LONDON).—The officers for the ensuing year are:—President, Mr. W. Martindale; Vice-Presidents, Mr. Henry Long and Mr. R. H. Parker; Hon. Treasurer, Mr. J. H. Matthews; Hon. Secretary, Mr. F. Andrews. Other members of the committee: Messrs. Arkinstall, Cracknell, Horsley, Knight, H. Mathews, Phillips, Taplin, Tennant, Worsley, Gulliver, Hyslop, and the divisional secretaries of the Pharmaceutical Society, who are members of the Association. At the last committee meeting of the Association a cordial vote of thanks was passed to Mr. H. Long for his courteous and able conduct as President of the Association from its foundation to the present time. The annual dinner will take place at the Holborn Restaurant on Wednesday, November 16; tickets, 5s.

Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only: and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries &c., will be attended to in the order received.

"Veterinary Counter Practice."

SIR,—I observed a correspondent say, in your last week's issue, I believe, that if the subscription to your excellent journal were doubled, yet chemists would not do without it. Personally, I re-echo that statement. But I write to inform you how useful I find the "Veterinary Counter Practice," issued from your office.

I have often had occasion to make up preparations for farmers, using the above publication as my guide, and I find they have given entire satisfaction; they seem to go "straight to the mark."

I had previously very little knowledge of animal-treatment, but with the help of this book and a measure of common sense, I have been able to do business which was satisfactory alike to the farmer and myself.

Yours truly,

Fraserburgh, N.B. JAMES A. ROBERTSON.

The October Examinations.

SIR,—In your correspondence the week before last I noticed a letter complaining about the date fixed for the Major examination held in London last month. I quite agree with the writer of that letter. It seems to me that it was arranged in such a manner that unless the candidate had been a student at Bloomsbury it would be impossible for him to get through the full course at the different schools. I have not the slightest doubt about the illegality of the proceedings. I am sure it is far more immoral to "diddle" a poor student out of his three guineas than the "diddling" that the President suspects every candidate (outside of Bloomsbury) of doing at the examination-rooms. How can the Society conscientiously hold money that was paid in as entrance fee for an October examination when no examination was held during that month? How long is it since October was in September?

Yours, &c.,

SMAILLIW. (152/49.)

Examiners' Latin.

On October 15 we mentioned that we had observed four errors in the Latin paper set for the Irish Preliminary. We asked correspondents to point them out to us. Mr. J. P. Ellerington, 1 Cranbourne Street, W.C., and Mr. E. M. Anderson, 38 Prince's, Dundee, pick out those which we had noticed, viz.:—*Jactatem* should be *jactatam*; *Temples* should be *templis*; *Ex* should be *eo*; *Cæsarum* should be *Cæsarem*; and an error of punctuation (which none of our correspondents noticed). The comma at Cæsarem should be removed to *fuerant*. Also inverted commas should have been at the beginning of the first line of the quotation from Virgil, and again (closing Dido's address) at the end of the fourth.

Among other corrections sent to us by other correspondents (none of whom select all our four) are several which are not, we think, justified. "A. F." says, "Eo concilio dimisso" (abl. abs.) should be "Eo concilio dimissi"; "C. E. A." thinks the last word should have been *viderunt* instead of *viderent*; and "J. A. W." proposes *divom* for *divum*. *Viderent* is the subjunctive of the *Obliqua oratis*. "They did not wish what they said to be divulged . . . for this reason, that they saw, if it were published, they would get into the gravest trouble." *Viderunt* is inadmissible; it is the chiefs who assign the reason for silence, not the reporter. The suggested change of *divum* to *divom* is not good. Some editions have it one way and some the other. The change of *dimisso* to *dimissi* for the sake of keeping the *ex* is not necessary, and would be no improvement. *Dimisso concilio* occurs again in Book ii. chap. 32 of the *Bellum Civile*.

The Complaint of Mr Jones, Umbrella mender, Concerning Methylated Spirit.

It's the wictim I've bin of a crooil houtrage, and my 'art and my howils is sore,
And the wust of it is that there ain't no blamed chanst of me gettin' no 'elp from the lor;
And the willian wot done it he cocks a big snook and he larfs at the bloomin' consarn;
And you says there is justice in Hingland, you does! But I ups and I says to you, "Garn!"

W'ere's the 'arm if I does take a swig now and then of the finish I buys at a shop?
It's *my* stummick, not yourn, wot I puts it into, and mine takes werry kind to a drop.
Two penn'orth I buys three or four times a day, and the 'prentice he looks like a kid
W'en I says it's for warnishin' handles of sticks. Could you guess wot the young sarpint did?

I cayn't tell wot he put in the lush the larst time—it were jollop or somethink like thot,
Or croton; a screw-belly wengeance it were—lor', I thought I'd 'ave dyde on the spot;
And it 'ain't no taste—leastways, nothink more than the meth sperrit itself might 'ave 'ad,
But it gev me the cholerar mawbus, no end—it did, and it gev me it ba-ad!

If I speaks to the beaks 'twould be *me* they'd run in for a-breakin' the revenoo lor,
I cayn't pay him out *no* way unless I lays for him and gives him one-two on the jor:
Then I'd get a month's 'ard and a turn on the mill—oakum-pickin' aint easy to larn—
And you says there is justice in Hingland, says you; and I ups and I says to you, "Garn!"

W. McE.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Acid. Glycer. Pepsin and Solution of Bismuth.

144/47. *Capsici* has had the following prescription to dispense. When first sent out, a dense thick precipitate was thrown down on the mixture being shaken. When dispensed by himself it was a clear brown mixture, without any precipitate being formed:—

Ac. glycer. pepsin.	℥ss.
Liq. bismuth. et am. cit.	ʒvj.
Æther. chlor.	ʒvj.
Tinct. capsici	♏vj.
Inf. gent. co. ad	℥xij.

We should certainly consider the mixture first dispensed the correct one. The addition of a very small quantity of acid to the B.P. solution of bismuth throws down an insoluble oxy-salt, which may to some extent be retarded, until well shaken, by the presence of the glycerine. When dispensed the second time, either the acid-glycerine of pepsine was not acid, or the solution of bismuth contained excess of free ammonia, or might be the old B.P. solution.

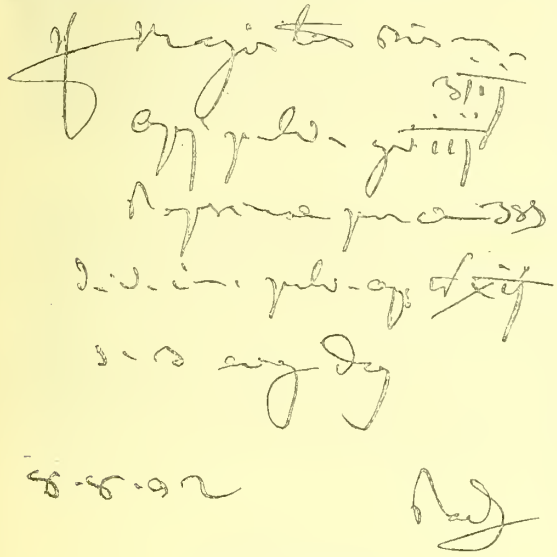
The Long Direction.

We have received about a dozen more examples of how the long directions can be written on a small label. For

these we have to thank the writers, but it is unnecessary to publish more facsimiles.

An Australian Prescription.

This is a facsimile of a prescription which an Australian subscriber sends us to show his pharmaceutical colleagues at home what they have to face out there. Who can give the best rendering on a post-card?—



LEGAL QUERIES.

Consult Alpe's "Handy-book of Medicine-stamp Duty" in regard to patent medicine questions.

General information regarding the laws affecting chemists and druggists is printed in THE CHEMISTS' AND DRUGGISTS' DIARY, 1892, *pp.* 161–5.

For stamp duties, licences, Customs regulations, &c., see the DIARY, *pp.* 151–9.

139/44. *Strychnia.*—We have not heard of any chemist who is registering the sales of proprietary medicines containing small doses of poisons in the first part of the schedule.

183/26. *Alpha* asks: "Can an individual obtain judgment against a registered company for a slander made by their solicitor to an employé of the individual?"

[The individual must be able to satisfy a jury that the slander was directed against himself, and that the solicitor was authorised by the company to utter it. Even then it is doubtful whether he would get a verdict.]

144/29. *Bert.*—You can only protect a title by registering it as a trade-mark. "Vaseline" is a registered trade-mark.

139/33. *W. G. W.*—It costs 1*l.* to get provisional protection for a patent. You can get an application-form through any money-order office. In applying for provisional protection you are not required to give details of your invention, but you must give a clear indication of your object, and you may be called upon to supply drawings, &c.

148/60. *R. H.*—You are liable to the manufacturers for the syphons, bottles, &c., unless they have expressly accepted your successor's responsibility. But if you can satisfy a Court of the circumstances which you state in your letter, your successor is liable to you.

152/42. *J. W.*—You would not be justified in making the cleanser for which formula was given on October 15 with methylated spirit, without consent of the Board of Inland Revenue.

151/37. *P. S. I.*—We have often stated that we cannot undertake to make trade-mark researches for correspondents. These have to be made at the Trade Marks Office, Southampton Buildings, Holborn, and a fee of 1*s.* per quarter-hour is charged.

151/73. *Carboy.*—There is no available list of the proprietary medicines which require a poison-label. We have named the best-known of these to which such a label is attached by the makers.

152/53. *Semper Idem.*—We should think it doubtful if Messrs. Blondeau et Cie. could stop you from using the title "Lanolia Cream," unless you rather closely imitated their style of putting up as well, but we should think the proprietors of lanoline could certainly get an injunction against you for infringement of trade-mark.

MISCELLANEOUS INQUIRIES.

Inquirers will please read the "Memoranda for Correspondents."

A list of "Books for Chemists" is given in THE CHEMISTS' AND DRUGGISTS' DIARY, 1892, *p.* 317.

For all particulars regarding Educational and Examinational matters refer to our issue of September 17, 1892.

Replies to queries are inserted according to the space open in any week, and insertion on any specific date cannot be guaranteed.

Back numbers of our weekly issue, containing formulæ, &c., occasionally referred to in answers, can be obtained from the Publisher at 4*d. each.*

139/67. *S. Hamilton.*—Such oils as Castor Oil and Cotton-Seed Oil are now very commonly decolorised by treating them with strong sulphuric acid, an ounce or two to the gallon, and afterwards washing with cold water. An acidified permanganate-of-potash solution is also used for olive oil, linseed oil, and the like. The solution may consist of 1 drachm of the permanganate, and 1 oz. of sulphuric acid to 1 pint of water. In each case the oil must be well agitated with the decoloriser, the mixture allowed to settle, and the oil then washed and dried.

128/46. *Polish* is sometimes asked for "True-lover's balls." He gives the girl customers glob. prunella. Is he right or not; and what is generally supplied in the circumstances?

132/37. *C. H.* (Tasmania) has a bet on with an English friend out there. The latter emphatically declares that the Majority of Doctors in England Dispense their own Medicines; "C. H." (whose experience is taken from Bournemouth mainly) is of a contrary opinion. We think he is wrong. Bournemouth and such other health-resorts are not criteria, as there the doctors are more of the consulting than the family-doctor type, and these, with few exceptions, do not dispense. But in general practice throughout the country, it is, unfortunately, the case that few doctors write prescriptions. In Ireland and Scotland dispensing by doctors is the exception. "C. H." is the poorer by a hat.

133/52. *Autolycus.*—(1) The cream of tartar will be perfectly sound after keeping in tins for eighteen months. (2) You can get a copy of the DIARY for 3*s.* 6*d.* on application to the publisher.

133/21. *W. F. S.*—Sulphur Tablets.—The troch. sulphur co. of Sir A. B. Garrod—viz., 5 grains of precipitated sulphur and 1 grain of cream of tartar, with a sufficiency of the B.P. lozenge-paste, and tincture of orange to flavour.

148/65. *C. B. S.*—Your oak-bark extract appears to contain a certain amount of tannic acid, but if, as you say, it is of no use for tanning purposes we fear it will be found of no commercial value. You might try if you can dispose of it as a colouring agent in Leeds or Manchester.

133/58. *C. D* (Belfast).—(1) There is little use in combining nux vomica with cascara sagrada for an Aperient Tonic. The cascara itself has a similar action to nux vomica upon the bowel. Then your prescription lacks a carminative. We should amend it as follows:—

Ext. cascara sag. liq.	℥j.
Tr. jalap.	ʒij.
Tr. zingib. fort.	ʒss.
Spt chloroform...	ʒj.
Glycerini ad	℥ij.

M.

Dose: ʒss. to ʒj.

(2) We must ask you to refer to recent numbers.

134/57. *C Crook.*—A. B. C. Liniment is a mixture of equal parts of aconite, belladonna, and chloroform liniments.

134/38. *Tragacanth* asks us to improve upon the following formula for Mother's Friend The colour changes from bright reddish brown to fawn colour in the course of a few weeks, and the mixture is not thick enough:—

Mag. carb. levis	ʒvij.
Pulv. rhei	ʒij.
Tr. opii	♏lxx.
Sp. am. arom.	ʒiij.
Sp. vini rect.	℥ij.
Ol. carui	♏xiv.
Ol. anisi	♏xiv.
Sacch. alb.	℥iv.
Aquæ	℥xxj.

M. Sec. art.

[The change in colour is due to the rhubarb and the magnesia. The two cannot go together without change. Bicarbonate of soda ʒss. may take the place of the magnesia with advantage, and use double the quantity of sugar. The opium is a mistake: better use potass. brom. ʒij. instead. The following is as nice a Mother's Friend as can be wished for:—

Potass. brom...	gr. xxiv.
Liq. bismuthi..	℥ss.
Tr. aurantii	ʒss.
Syrupi	ʒvi.
Aquæ ad	℥ij.

M.

Dose: A teaspoonful at bed-time when restless. Half the dose for children under a year.

Restless children have generally something the matter with their digestive organs. When that is known, a few drops of vin. pepsin should be added to each dose of the above.]

180/33. A Veterinary Query.—*Spes* asks for a reliable formula for inflammation of the kidneys, which, he adds, is rather common in his district (Midlands). It must be remembered that there is no specific for such a serious illness as inflammation of the kidneys, and we do not believe it to be "common" in "Spes's" district or any other. It is an unfortunate tradition with horse-keepers to say, whenever a horse shows abdominal pain, "It's in his water." The oracular manner in which this remark is delivered by every stableman would lead the veterinary surgeon in attendance to think it were something new and original, if he had not heard it so often. Injury is done daily to thousands of valuable horses by the unnecessary and harmful practice of giving diuretics, and where a case of inflammation of the kidneys does occur it has its origin in the excessive use of these agents in nine cases out of ten. We should say that such a case was too serious for the veterinary counter prescriber, and should be treated by a qualified veterinary surgeon. If such assistance cannot be got, and the owner is convinced that inflammation of the kidneys is really what the animal is suffering from, he will do well to keep up an abundant supply of hot water to renew large bran or linseed poultices (half and half is best) along the loins, and to inject warm water per rectum from time to time. For medicines give an aqueous solution of opium equal to 10 grains for injection with each clyster per rectum. For internal use as a drink—or draught, as it should be called—

Ext. belladonnæ	ʒj.
Pot. bicarb.	℥iv.

This dose should be given three times in twenty-four hours, in a pint of linseed-tea or other demulcent fluid. If the animal can be induced to drink linseed-tea or milk, so much the better. Carrots and bran as food unless he refuses. Beans and other highly nitrogenous food should be avoided. A urniferous sweat is often a prelude to recovery, as such vicarious function on the part of the skin gives the kidneys time for function to be restored. If diuretics are needed at all, they should be given with warm mashes on Saturday night or at a time when the animal will not be exposed to chills the next day.

151/6. *Alpha.*—In valuing stock and fixtures for a balance sheet it is usual to price good stock according to a wholesale list. An annual deduction of, say, 10 per cent. on the cost price of fixtures is a fair allowance for depreciation, but these are not generally taken. In valuing for a sale an allowance of at least 10 per cent. off wholesale list prices would have to be made to allow for bad stock and fixtures taken at what they might be worth. Goodwill is a very variable commodity. Of course the seller gets something for it if he can, but in these days of store competition the snug connections of old times are scarcely reckonable. Goodwill is appreciable in a business where the profits can be assumed to be pretty sure.

Information Wanted.

Replies to the following are requested by subscribers of THE CHEMIST AND DRUGGIST.

123/33.—A Croydon correspondent has a horsey customer whose Pharmacopœia contains some queer things. He is a Lewes man, and his medicines are the following:—

The names	What they mean
Oil of astick	?
„ aaron	?
„ spike	Linseed oil, turpentine, and oil of origanum
„ man	Ol. animalis
„ vidgen	„ origani
„ sent	?
„ aspes	?
„ acklen	?
„ ackham ..	?
„ oxteys	?
„ ackerworm ..	Oil of earthworms
„ blue astick ..	?
„ beed	?
„ clarrence ..	?
„ rennelt	?
„ coaltsmint ..	Oil of horsemint (ol. monardæ)
„ dragan	(?) Linsesd oil coloured with dragon's blood
„ dappies	Dippel's oil
„ sweet duty ..	(?) Sperm oil (ol. cetacei)
„ drageman ..	Ol. origani
„ hounslow ..	?
„ scagden ..	?
„ may	?
Sulphur of fly	Sulphur vivum
Tincture gladmar ..	(?) Laudanum
Red whin	(?) Ruddle or Venetian red
Jander rosam	Amber rosin

The names appear to be fearfully phonetic. We should be pleased if subscribers would assist us in filling up the blanks. A few "happy thoughts" jotted down on postcards addressed to us should do it.

136/62. *Yorkshireman* says he will be glad to hear what chemists generally have found to be the cheapest (in consumption of gas) and best way of shop-lighting; also the best and cheapest kind of stove for shop-heating, either oil, or gas, or coke.

151/41. Who is the maker of Hyaline?

CALIFORNIA LIBRARY INSTITUTE

20 HIGHEST AWARDS.

Pears' Soap

Soap Makers by Appointment to H.R.H. The Prince of Wales.

RETAIL PRICES.			WHOLESALE PRICES. Per Dozen.
6d.	SIZE, unscented	- - -	4s.
1s.	„	all shapes, Washing or Shaving	8s.
1s.6d.	„	Ditto ditto	12s.
2s.6d.	„	(The Washing Tablets are perfumed with Otto of Roses)	20s.
TRANSPARENT GLYCERINE	2s.	per Box of 3 Tablets	16s. Per dozen Boxes.

DISCOUNT of 20 per Cent.

On all ORDERS of NOT LESS than £5.

(GROSS TRADE-PRICE VALUE.)

If accompanied by Remittance,

[Lesser Quantities 15 per Cent. Discount only.]

IMPORTANT STATEMENT.

No Dealer in the Kingdom, "Wholesale or Retail," for any quantity whatever obtains more than the above 20 PER CENT. Discount.

(Signed), A & F Pears

71-75, NEW OXFORD STREET, LONDON, W.C.

WYETH'S
BEEF JUICE.

A liquid preparation of the Choicest Beef, containing the Nutritious Albuminous principles in an unaltered and soluble form.

Because WYETH'S BEEF JUICE is Pleasant and Agreeable to the taste.

Possesses five times more nourishing properties than other similar preparations.

Nutrient and stimulant properties so proportioned that it can be retained by the stomach in extreme cases of debility.

Two-ounce bottle contains all the Nutritious Albuminous principles of three pounds of clear lean meat.

Because these and many other points of superiority have been brought to the attention of Medical Men, Nurses, and Hospitals.

Because they have proven the claims *TRUE*, the demand for WYETH'S BEEF JUICE has become constant, and constantly increasing throughout Great Britain.

For the information of the

RETAIL CHEMIST

who has not already stocked WYETH'S BEEF JUICE we make this announcement.

GENERAL AGENTS FOR GREAT BRITAIN AND FRANCE—

LONDON. | **ROBERTS & CO.** | PARIS.

DISTRIBUTING AGENTS FOR

LANCASHIRE—JAS. WOOLLEY, SONS & CO., Manchester.
YORKSHIRE—GOODALL, BACKHOUSE & CO., Leeds.
SCOTLAND—RAIMES, CLARK & CO., Edinburgh.
And all Wholesale Druggists and Chemists.

PREPARED BY

JOHN WYETH & BROTHER,

Manufacturing Pharmaceutical Chemists,

PHILADELPHIA, PA., U.S.A. LONDON, 30 SNOW HILL, E.C.

LIQUOR CARNIS (CAFFYN) IN INFANT FEEDING.

"In the diet treatment of Fevers, where it is of the utmost importance to administer fluid nutriment susceptible of ready incorporation with the blood, Liquor Carnis is being used with the happiest results by physicians. These are a few of the more prominent applications of Caffyn's Liquor Carnis to the normal nutrition of young and old, and to the wants of those who are invalided from any ordinary causes.

"The problem of infant and invalid feeding has thus been solved. There is no need to complain that now stimulating Beef Extracts form the only means of giving to those of weak digestion their quantum of nitrogenous matter. Caffyn's Liquor Carnis stands as the ideal food of the physiologist. Science declares it to be so, and from this court of arbitration and investigation there is, and there can be, no appeal."

Dr. Andrew Wilson, F.R.S.E.

MALTO-CARNIS (CAFFYN).

"The Liquor Carnis Company have produced a very admirable preparation of extract of malt and cocoa in combination with the well-known Liquor Carnis, this last, as our readers know, being a pure meat extract, notable as containing all the nutrient principles of beef. The combination thus made is a happy one, since to the stimulating properties of the meat we find added the nutrient qualities of cocoa (giving fat and other non-nitrogenous foods) along with the digestive powers of malt. This preparation is simply added to boiling milk in the proportion of a dessertspoonful to a breakfast-cup, and is then sweetened to taste. We should say this preparation would be singularly well adapted for dyspeptics, as well as for children's dietary; while in the vomiting of pregnancy, when difficulty is found in selecting a food which the stomach will retain, it should prove highly serviceable. The meat albuminoids of the Liquor Carnis, being uncooked, are readily absorbed by the stomach, this fact increasing materially the value of the preparation to invalids. Cyclists will find a bottle of this preparation a veritable friend in need when on long journeys, and in the treatment of the alcohol habit we understand it has already received the deservedly high commendation of physicians."

Medical Gentlemen who desire to test Caffyn's Liquor Carnis, Malto-Carnis, Jelly Carnis, or Suppositories of unchanged Meat Juice, will be supplied with original packages by communicating their desires to—The LIQUOR CARNIS COMPANY (LIMITED), LONDON, E.C., who are the Sole Manufacturers and Patentees.

CRESCENT TRADE B.M&Co. MARK BRAND.

BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

ANALYSIS.

Bicarbonate of Soda	97·20
Mono Carbonate of Soda	1·90
Sulphate of Soda	trace
Chloride of Sodium	·035
Moisture	·82
Insoluble	nil

PURE ALKALI,

GUARANTEED 58 DEGREES.

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers, Bleachers, Dyers; Glass, Paper, and Soap Makers.

CONCENTRATED CRYSTAL SODA

(Sesqui-Carbonate).

By far the Purest and Cheapest form of WASHING SODA.

Only 1 lb. of Concentrated Crystal Soda required to do the work of 2 lbs. of Washing Soda.

SODA CRYSTALS

OF THE FINEST QUALITY.

BRUNNER, MOND & CO., LIM.

Manufacturers of Soda by the Ammonia Process,

NORTHWICH, CHESHIRE.

CAPSULED "McK. & R." PILLS.

McKesson & Robbins : Originated 1870 : New York.

WHY SHOULD THE "McK. & R." PILLS BE PRESCRIBED?

1. Because they are prepared from materials of the highest quality only.
2. Because they are made according to the B.P. or other Standard Authorities, and therefore all the combinations are well tried and of recognised value.
3. Because they are taken pleasantly—being tasteless—and readily, being ovoid in form.
4. Because they are not subjected at any stage of preparation to the injurious action of heat.
5. Because the coating of *pure transparent gelatine* preserves the contents from oxidation.
6. Because they are always soluble, and the contents soft and quickly disintegrated.

LIST OF PRINCIPAL CAPSULED PILLS.

Aloes, all the B.P. combinations ..... 5 gr.
Aloes, Dilute (Dr. Hall Dinner Pill) ..... 4 gr.
Aloes Barb. | Pulv. Ext. Glycyrrh.
Saponis Pulv. | Theriaca, āā ..... 1 gr.
Aloes and Nux Vomica—
Aloes Soc. ..... 1½ gr. | Ext. Nucis Vom. .... ½ gr.
Aloin ..... 1/10, ¼, ½, 1 gr.
Aloin, various combinations.
Anti-Dyspepsia (Fothergill)—
Strychninæ ..... 1/30 gr. | Pulv. Ipecac. ..... 2-3 gr.
Pulv. Piper Nig. ..... 1½ gr. | Ext. Gent. ..... 1 gr.
Arsenious Acid ..... 1-20, 1-50 gr.
Asafœtida, U.S. and B.P. ..... 5 gr.
Atropine ..... 1-100, 1-300 gr.
Blue Pill, B.P. ..... 1, 2, 3, 5 gr.
Blue Pill, with Colocynth and Hyoscyam. ..... 5 gr.
Calcium Sulphide ..... 1-10, 1-4, 1-2, 1 gr.
Calomel, Colocyn., and Hyosc. ..... 5 gr.
Calomel Co., B.P. ..... 5 gr.
Camphor and Hyoscyam. ..... 2 gr.
Camphoræ. | Ext. Hyoscy., āā ..... 1 gr.
Cannabis Indica ..... 1-4, 1-2 gr.
Cascara Sagrada ..... 3 gr.
Cathartic Comp., U.S.P.
Ext. Jalap ..... 1 gr. | Hyd. Subchlor. ..... 1 gr.
Ext. Coloc. Co. .... 1 1-3 gr. | Gambog. ..... 1-4 gr.
N.B.—The ready solubility of the "McK. & R." Pills is readily proved by taking a dose of these.
Colocynth Comp., B.P. ..... 4, 5 gr.
Colocynth, other combinations.
Copaiba Compound—
Cubebæ Pulv. ..... 2 gr. | Mass. Copaib. ..... 1 gr.
Ferri Sulph. Exsic. .. 1-2 gr. | Tereb. Venet. .... 1 1-2 gr.
Corrosive Sublimate ..... 1-30, 1-20, 1-10 gr.
Croton Oil ..... 1-2 gr.
Diuretic—
Ext. Buchu, Potass. Nitrat. ..... 1 gr.
Scillæ Pulv. ..... 1-2 gr.
Emmenagogue—
Ferr. Sulph. Exsic. ..... 1 1-2 gr.
Thus, American ..... 1 1-2 gr.
Aloes Socot. ..... 1-2 gr.
Ergotin ..... 3 gr.
N.B.—Each Pill = 30 gr. ergot or 30 ms. fl. extract. This form is more reliable and uniform in effect and more agreeable than the liquid preparations.
Euonymin ..... 2, 3 gr.
Iodoform and Iodoform with Iron ..... 1 gr.
Ipecac. ..... 1-4, 5 gr.
Ipecac. Co. ..... 5 gr.
Ipecac. and Squill, B.P ..... 5 gr.
Iron Pill, B.P. Add. ..... 3, 5 gr.
Iron Arseniate ..... 1-8 gr.
Iron reduced by Hydrogen (Quevenne) ..... 1, 4 gr.
Iron and Quinine Citrate ..... 2 gr.
Laxative, Vegetable—
Res. Podoph. | Ext. Coleo. Co. ..... 1 gr.
Ext. Hyoscy. | Jalapæ
Ext. Tarax, āā ..... 1-4 gr. | Res. Leptand. āā .... 1-2 gr.
Ol. Menth. Pip.
Mercury, Biniodide ..... 1-16 gr.
Mercury, Proto-iodide ..... 1-20, 1-16, 1-8, 1-4 gr.
N.B.—Made from the absolutely pure *yellow* impalpable powder, free from mercury and from biniodide.
So-called "green" prote-iodide contains uncombined mercury.
Mercury with Chalk ..... 1 gr.
Morphine Muriate ..... 1-8, 1-4 gr.
Nitro-Glycerine ..... 1-200, 1-100, 1-50 gr.
Opium ..... 1 gr.
Opium and Camphor ..... 1 gr.
Opii Pulv. ..... 1 gr. | Camphoræ ..... 2 gr.
Pepsin, Pure ..... 1 gr.
Phosphorus ..... 1-100, 1-50, 1-30 gr.
N.B.—In no kind of Pill are the advantages of the "McK. & R." method better exemplified or more in request. No other brand of Phosphorus Pills is equally reliable for the administration of the unoxidised medicament.
Phosphorus and Iron—
Phosphor. Pur. .... 1-50 gr. | Ferr. Redact. ..... 2 gr.
Phosphorus, Iron, and Quinine—
Phosphor. Pur. .... 1-100 gr. | Ferri Carb. ..... 1 gr.
Quininæ Sulph. ..... 1 gr.
Phosphorus and Nux Vomica—
Phosphor. Pur. ..... 1-50 gr. | Ext. Nucis Vom. .... 1-4 gr.
Phosphorus and Quinine—
Phosphor. Pur. ..... 1-50 gr. | Quininæ Sulph. ..... 1 gr.
Phosphorus and Valerianate of Zinc—
Phosphor. Pur. ..... 1-50 gr. | Zinci Valer. ..... 1 gr.
Picrotoxin ..... 1-80 gr.
Podophyllin ..... 1-8, 1-4, 1-2 gr.
Quinine, Bisulphate ..... 1-4, 1-2, 1, 2, 3, 4, 5 gr.
Quinine, Sulphate ..... 1-4, 1-2, 1, 2, 3, 4, 5 gr.
Quinine Co. (Anti-Malarial).
Largely prescribed in America with excellent results.
Rhubarb Comp., B.P. ..... 5 gr.
Rhubarb with Blue Pill ..... 5 gr.
Salicylic Acid ..... 2, 5 gr.
Soap Comp., B.P. ..... 5 gr.
Squill Comp., B.P. ..... 5 gr.
Strophanthus ..... 1-20, 1-4 gr.
Strychnine ..... 1-50 gr.
Tenio Laxative (Fothergill)—
Quininæ Sulph. .... 2-3 gr. | Ferri Redact.
Strychn. ..... 1-30 gr. | Ext. Bellad., āā ..... 1-4 gr.
Valerianates, Iron, Quinine, and Zinc.
Warburg's Tincture and the same without Aloes.
Each Pill = 1 fl. drm. of the Tincture.
Zinc Phosphide ..... 1-4, 1-2 gr.
Zinc Valerianate ..... 1 gr.

Special Combinations of 3,000 or more Pills made and Capsuled to order for Hospitals, &c., at Special Quotations.

London Agency:—Messrs. S. Maw, Son & Thompson, 7 to 12 Aldersgate Street, E.C.

ALSO SUPPLIED BY

MESSRS. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.;

MESSRS. GRIMWADE, RIDLEY & CO., 7 Union Court, Old Broad Street, London, E.C.

MRS. WINSLOW'S

SOOTHING SYRUP

FOR CHILDREN TEETHING,

Greatly facilitates the process of Teething, by softening the gums, reducing all inflammation; will allay ALL PAIN and spasmodic action, and is

SURE TO REGULATE THE BOWELS.

Depend upon it, Mothers, it will give rest to yourselves, and

RELIEF & HEALTH TO YOUR INFANTS.

Mrs. WINSLOW'S SOOTHING SYRUP

Has been used for over Fifty Years by Millions of Mothers for their children while teething with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhœa.

MRS. WINSLOW'S ALMANACKS FOR 1893, WITH COUNTER BILLS & SHOWCARDS,

Sent Free of Charge, on application to

33 FARRINGDON ROAD, LONDON.

BROWN'S BRONCHIAL TROCHES

CURE COUGH, COLD, HOARSENESS, AND INFLUENZA. CURE ANY IRRITATION OR SORENESS OF THE THROAT. RELIEVE THE HACKING COUGH IN CONSUMPTION. RELIEVE BRONCHITIS, ASTHMA, AND CATARRH. CLEAR AND GIVE STRENGTH TO THE VOICE OF SINGERS, AND ARE INDISPENSABLE TO PUBLIC SPEAKERS. SOOTHING AND SIMPLE, CHILDREN CAN USE THEM, AS THEY ASSIST EXPECTORATIONS AND RELIEVE HOARSENESS.

NOTICE.—Brown's Bronchial Troches are guaranteed to contain no Opium or other Poison.

London Office—33 FARRINGDON ROAD.

THE

MEXICAN HAIR RENEWER

Prevents the Hair from Falling Off.

Restores Grey or White Hair to its **ORIGINAL COLOUR.**

Being delicately perfumed, it leaves no unpleasant odour.

IS NOT a Dye, and therefore does not stain the skin, or even white linen.

Should be in every house where a **HAIR RENEWER** is needed.

ASK YOUR CHEMIST OR HAIRDRESSER FOR THE MEXICAN HAIR RENEWER,

Price 3/6 per Large Bottle. Prepared only by

THE ANGLO-AMERICAN DRUG COMPANY, LIM.

33 FARRINGDON ROAD, LONDON, E.C.

THE

"STANDARD OF QUALITY"

ESSENTIAL OILS

MANUFACTURED OR SELECTED BY

DODGE & OLCOTT,

NEW YORK, U. S. A.

ESTABLISHED 1798.

OILS BAY, CARAWAY, CLOVES, CUBEBS, PEPPERMINT, SANDAL, SASSAFRAS, SPEARMINT, TANSY, WINTERGREEN, WORMWOOD AND MANY OTHERS.

AGENTS FOR THE UNITED KINGDOM—

ASHMORE & SON,

6 MINCING LANE,

London, E.C.

AGENT FOR THE CONTINENT OF EUROPE—

CHAS. WESTPHAL,

195 Upper Thames Street,

London, E.C.

COOPERS'

UNALTERABLE, RELIABLE, AND EFFICIENT

CONCENTRATED LIQUORS & CHEMICAL SYRUPS

SAVE TIME, LABOUR, MONEY, and ENDLESS WORRY!!!

These Liquors produce Syrups that cannot be excelled as Pharmaceutical Preparations.

PACKED IN 4 oz, 8 oz., and 16 oz. (FLUID) BOTTLES. SPECIAL QUOTATIONS IN BULK.

		Per lb.
Liquor Calcis Hypophosph.	1 to 7	3/6
Liquor „ Lactophosph.	1 to 7	5/-
Liquor Ferri et Calcis Lactophosph.	1 to 7	5/-
Liquor Ferri Lactophosph.	1 to 7	5/-
Liquor „ Hypophosph.	1 to 7	3 6
Liquor „ Bromidi	1 to 7	6/-
Liquor „ Iodidi	1 to 7	8/6
Liquor „ Phosph.	1 to 7	2/6
Liquor „ „ Comp.	1 to 3	2/6
Liquor Eastoni	1 to 3	8/-
Liquor Hypophosph. Comp.	1 to 7	5/-

		Per lb.
Liquor Hypophosph. Comp. c. Quiniæ et Strychniæ, B.P.C.	1 to 7	7/-
Liquor Tolutani	1 to 7	3/-
Liquor Papaveris	1 to 7	3/-
Liquor Sennæ	1 to 7	3/-
Liquor Rhei	1 to 7	3/-
Liquor Rhamni	1 to 7	3/-
Liquor Rhæados	1 to 7	3/-
Syrup Ferri et Quiniæ Hydrobrom.		4/-
Syrup Ferri et Quiniæ Hydrobrom. c. Strychniæ		4/6

CAN BE OBTAINED THROUGH ANY WHOLESALE HOUSE. SAMPLES POST FREE.

SOLE MANUFACTURERS—

WOOD, COOPER & CO., 2 NEW NORTH ROAD, HOXTON, **LONDON, N.**

BARTLETT HOOPER & CO.

MANUFACTURING PHARMACISTS,

134 Upper Thames Street, London, E.C. (formerly 43 King William Street, E.C.).

Capsules.

Cachous.

Pastilles.

Bougies.

Pessaries.

Suppositories.

Compressed Pellets.

SPECIAL RATES TO SHIPPERS.

NOTICE.

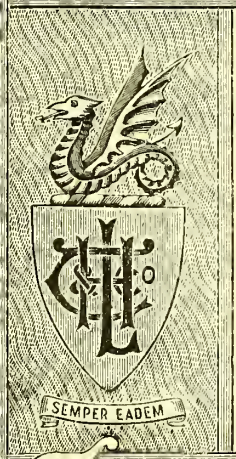
Particular attention paid to the manufacture of goods suitable for warm climates.

PRICE LIST ON APPLICATION. TELEGRAPHIC ADDRESS—"CACHOUS LONDON."

42

SPECIAL NOTICE TO CHEMISTS

"LLOYD'S LEICESTER"



The manufacture of Soluble Pearl Coated Pills was first introduced into Leicester by Mr. T. HOWARD LLOYD (18 years partner in the firm of JOHN RICHARDSON & CO.), and they are now made with the most complete and modern machinery, ensuring accuracy and uniformity, by

T. HOWARD LLOYD & CO. HIGH STREET, LEICESTER.

SOLUBLE PEARL COATED PILLS

Special NET CASH List.

In Ten Gross and One Pound Tins for CASH WITH ORDER.

	Per gross.	Per lb.
Pil. Aloes et Ferri, P.B.	6*d.*	4/-
,, Colocynth. Co., P.B.	11*d.*	8/-
,, Colocynth. et Hyos., P.B.	1/1	9/-
,, Rhæi Co., P.B.	6*d.*	4/3
APERIENT. 105 (*Each Pill contains ⅓ gr. of Calomel*)	6*d.*	4/3
106 As No. 105, with 1 gr. Calomel in each Pill	6*d.*	4/6
107 As No. 105, without Calomel	6*d.*	4/3
110 Hospital Pills, each containing ½ gr. of Calomel	6*d.*	4/6
ANTIBILIOUS.		
62 Hydrarg. Pil. gr. i.; Ext. Coloc. Co.; Pil. Rhei Co. aa. gr. ij.	1/-	8/6
262 Podophyllin gr. ½; Ext. Coloc. Co. gr. ij.; Ext. Hyoscy. gr. i.	1/2	10/-
COUCH.		
164 Pulv. Ipecac. Co.; Pulv. Gum. Ammon. aa. gr. iss.; Pulv. Scillæ gr. i.; Saponis Hyspan. gr. ss.	7*d.*	5/-
167 Pulv. Ipecac.; Pulv. Scillæ aa. gr. ¾; Pulv. Capsici; Pulv. Opii aa. gr. ¼; Pulv. Gum. Ammon.; Ext. Conii aa. gr. i.	8*d.*	5/6
CASTOR OIL.		
289 Rhei Pulv.; Potass. Sulph. aa. gr. iss.; Pulv. Sapo. Hysp.; Ol. Ricini aa. gr. ss.; Ol. Crotonis gr. $\frac{1}{16}$	6*d.*	4/-
TONIC. 370 (*Blaud's Formula*)	6*d.*	4/-
371 (*Blaud's Formula, Martindale's improved*)	6*d.*	4/-
"LITTLE" APERIENT. 458	5*d.*	20/-
"LITTLE" ANTIBILIOUS. 462	5*d.*	20/-

Samples of the above with our Complete List sent on application.

In ordering, please note Address, and see that the Label on each Bottle or Tin corresponds with the above Block. [1]

London International and Universal Exhibition, 1884, Gold Medal Awarded for our Pharmaceutical Preparations.
Calcutta Exhibition, First-class Certificate and Two Prize Medals awarded for our Pharmaceutical Preparations.

HEWLETT'S

LIQUOR SANTAL FLAV. c. BUCHU et CUBEBÂ

THE ORIGINAL PREPARATION.

Price (in England) 10s. 6d. per pound, packed (for Dispensing only) in 10-oz., 22-oz., 40-oz., and 90-oz. Bottles.

HEWLETT'S "PERMANENT" LIQUOR FERRI IODIDI.
LIQUOR EASTONII (HEWLETT'S).
SYRUP EASTONII (HEWLETT'S).
PHOSPHORISED COD LIVER OIL EMULSION (HEWLETT'S).

C. J. HEWLETT & SON, MANUFACTURING CHEMISTS, 40, 41, & 42 CHARLOTTE ST., LONDON, E.C.
ESTABLISHED 1832.

Physicians will oblige, when ordering Liq. Santal Flav. cum Buchu et Cubebâ, by writing, "Liquor Santal Flav. c. Buchu et Cubebâ (Hewlett's)."

Composition Essence

Unequalled for its Aroma and Strength. 9½d. lb. in Winch. Quarts; in 10-gall. Casks, 8½d. lb. 5% discount.

"Premier" Ext. Malt.

MANUFACTURERS

RAIMES & Co., YORK. & RAIMES, CLARK & Co., EDINBURGH.

SPECIAL QUOTATIONS FOR BULK, WITH SAMPLE, ON APPLICATION.

44

THE SMALLEST TYPE

WE USE

MAY

HERE BE

COMPARED WITH

THE LARGEST.

THE DIFFERENCE IS CONSIDERABLE.

JOHN RICHARDSON & CO., LEICESTER, LIMD.

ARE

THE LARGEST

MAKERS OF COATED PILLS IN THE WORLD.

THE OUTPUT OF

OTHER MAKERS

SINKS

BY

COMPARISON

IN SIMILAR RATIO.

SEND FOR THEIR LIST AND QUOTATIONS.

Dr. J. COLLIS BROWNE'S

CHLORODYNE.

THE ORIGINAL AND ONLY GENUINE.

IMPORTANT CAUTIONS.

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that "Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was as deliberately untrue as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital."

The VICE-CHANCELLOR also stated, "that Chlorodyne was a fanciful name, and had application been made sooner, the Court would have given Dr. Browne protection."

LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated, "that had application been made at a proper time and place, the Court would have found means to restrain the Defendant from misrepresenting the decision of the Vice-Chancellor."

LORD JUSTICE JAMES, on appeal, stated in his judgment, "that the Defendant Freeman had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood."

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the *Times*, November 14th, 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never used any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

The Editor of the *Medical Times*, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published by the Defendant as testimony to his medicine.

Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation; nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, Dr. J. Collis Browne's Chlorodyne, is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

ONLY GENUINE

FURTHER IMPORTANT NOTICE.

The subjoined list of eminent Firms concur with Vice-Chancellor Sir W. Page Wood's statement in Court, that Dr. Collis Browne was undoubtedly the Inventor of Chlorodyne; and that when Chlorodyne, or the Original Chlorodyne, is ordered, they invariably supply Dr. J. Collis Browne's:—

Apothecaries' Hall,	London
Allen, Hanbury & Co.,	,,
Baiss Brothers,	,,
Banks & Richards,	Birmingham
Barron, Harvey & Co.,	London
Bell, John, & Co.,	,,
Bourne & Taylor,	,,
Corbyn & Co.,	,,
Cox & Gould,	,,
Curling & Co.,	,,
Curtis & Co.,	,,
Davy, M'Murdo & Co.	,,
Dobbin, W., & Co., Limited,	Belfast
Drew, Barron & Co.,	London
Drew, B., & Alexander,	,,
Dunn & Company,	,,
Edwards, W.,	,,
Evans, Gadd & Co.,	Exeter
Evans, Lescher & Webb,	London
Ferris & Co.,	Bristol
Foulger, S., & Son	London
Frazer & Green,	Glasgow
Gale & Co.,	London
Giles & Son,	Clifton
Goulding, Messrs.,	Cork
Gratton & Co.,	Belfast
Grimwade, Ridley,	London
Grindley & Son,	Chester
Hearon, Squire & Francis,	London
Hodgkinson, Tonge & Stead,	,,
Hopkins & Williams,	,,
Hovenden, R., & Sons,	,,
Hunt & Co.,	Exeter
Hunt, A., & Co.,	,,
Johnson, J. H. & S.,	Liverpool
Langton, W., & Co.,	London
Lynch & Co.,	,,
Mander, Weaver,	Wolverhampton
Marsden & Sons,	London
Maw & Son,	,,
Meggeson & Co.,	,,
Mackay, John, & Co.,	Edinburgh
Morson, T., & Son,	London
Newbery & Sons,	,,
Oldham, G., & Co.,	Dublin
Parsons & Richardson,	Leicester
Peake, Allen, & Co.,	Dublin
Raimes & Co.,	York
Raimes & Co.,	Edinburgh
Sang & Barker,	,,
Sanger, J., & Sons,	London
Sim, James, & Co.,	Aberdeen
Smeeton, W.,	Leeds
Southall & Co.,	Birmingham
Sutton, W., & Co.,	London
Tomlinson, Hayward & Co.,	Lincoln
Treacher, Hodgkinson & Co.,	London
Westrup, J. B.,	Kensington
Westwood & Hopkins,	London
Woolley, James,	Manchester
Wyleys & Brown,	Coventry
Yates & Co.,	London

After these public statements in a Court of Equity, and subsequent confirmation by the Trade at large, no Chemist can conscientiously use or sell any other compound for Chlorodyne without committing a breach of faith, unjust to patient and physician. The value of the remedy *alone* creates the great demand.

Sold in Bottles—1s. 1½d., 2s. 9d., 4s. 6d., and 11s. Usual Discount to the Profession.

SOLE MANUFACTURER,

J. T. DAVENPORT, Pharmaceutist,

33 GREAT RUSSELL STREET, BLOOMSBURY SQUARE, LONDON.

LEO & CO.'S
COMPRESSED DRUGS

Maintain their high reputation against all comers for general excellence of quality and finish.

SPECIAL LINES.

	1 lb.	7 lbs.
CHLORATE OF POTASH	1/-	/11
CHLORATE OF POTASH AND BORAX	1/-	/11
COMPOUND SULPHUR	1/-	/11
SODA BICARB.	1/-	/11
SODA MINT	1/-	/11

NET CASH WITH ORDER. [1]

A FULL ASSORTMENT OF COMPRESSED GOODS KEPT. PRICES ON APPLICATION.

8 CREECHURCH LANE, LONDON, E.C.

LOFTHOUSE & SALTMER,

MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS, HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on application.
DEALERS IN PURE CHEMICALS for Medicinal, Photographic, and Commercial purposes.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot, Otto de Rose, and all

Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine, Aniline Dyes; Bees' Wax, &c., &c.

MANUFACTURERS of Very Superior Flexible Gelatine Capsules of Balsam Copaiba, Cascara Sagrada, Castor Oil, Cod-liver Oil, Santal Oil, &c. Samples and Lowest Quotations per 1,000, or in Boxes for Retail, will be sent on application for either the Wholesale or Retail Trade.

MORRIS & CALLARD,

PONTAMMAN CHEMICAL WORKS,

AMMANFORD, R.S.O., CARMARTHENSHIRE,

MANUFACTURERS OF

ACETIC ACID, P.B., ACETIC ACID FORT., SP. GR. 1-040

ACETATE OF SODA, COPPERAS,

PURE WOOD NAPHTHA, SULPHURIC ACID, & CHARCOAL

Telegraphic Address: "CALLARD, AMMANFORD." Prices and Samples on application. Established A.D. 1840.

47

MACKEY, MACKEY & CO.

Wholesale Druggists, Manufacturing Chemists.

MEDALS—Cape Town, 1877; Brighton, 1881; Cork, 1883; Dublin, 1884; International Inventions Exhibition, 1885. GOLD MEDAL—International Health Exhibition, 1884.

Makers of Soluble Gelatine-, Pearl-, and Sugar-coated Pills, Tabellæ, Hypodermic Injections, Pessaries, Suppositories Bougies, Pastils, Fluid Extracts, Oleates of the Metals.

SPECIALTIES—Mistura Bismuthi Co. (Tonic Digestive); Mistura Cerii Co. (and all Preparations of Cerium); Glycerol Pepsine et Euonymin (Digestive Cholagogue); Glycerol Podophylli (Cathartic); Mistura Cascaræ Sagradæ Co. (Tonic Laxative); OL. EUCALYPTI, P.B.; Eucalyptol Disinfectants; Oxychlorogene Disinfectants; Carbolic Acid; Carbolic Powders.

Drugs and Chemicals of Best Quality. New Remedies and Special Pharmaceutical Preparations, Veterinary Drugs and Chemicals. Price Lists and Samples on Application.

1 & 2 BOUVERIE STREET, FLEET STREET, LONDON, E.C.

NEPENTHE.

THE SAFEST AND BEST PREPARATION OF OPIUM.

PRODUCES NEITHER HEADACHE, SICKNESS, NOR CONSTIPATION.

PREPARED EXCLUSIVELY FROM OPIUM.

Although many new hypnotics and analgesics have been recently introduced, NEPENTHE still holds its position as THE hypnotic and seda tiv *par excellence.* "Nepenthe" is registered under the Trade Marks \ ct, and is our sole property. *No other preparation* should be substituted w he Nepenthe is ordered in a prescription.

Sent out in bottles bearing a label in white letters upon a green ground. We prepare also *Double Strength Nepenthe,* and Glycerole of Nepenthe (eight times the single strength) for hypodermic injection.

PRICES AND TERMS ON APPLICATION.

FERRIS & CO., WHOLESALE AND EXPORT DRUGGISTS, **BRISTOL.**

MAGNESIA

CARBONATE, CALCINED, AND HYDRATE.

PURE FLUID MAGNESIA.

THE WASHINGTON CHEMICAL CO., WASHINGTON, COUNTY DURHAM, ENGLAND.

SALICYLIC ACID AND SALICYLATES

MANUFACTURED UNDER KOLBE'S PROCESS BY

J. HAUFF, FEUERBACH - STUTTGART.

To be obtained from the Sole Agents. N.B.—Stock kept in London.

FUERST BROS., 17 PHILPOT LANE, LONDON, E.C.

Telegrams—"FUERST LONDON." Telephone No. 10 0.

48

SCHERING'S

PIPERAZINUM PURUM

(PATENT).

NON-TOXIC AND NON-IRRITANT.

Readily soluble in water. It dissolves Uric Acid concretions twelve times more freely than Lithia Carbonate.

Is indicated in all cases of Gouty Affections, and in Stone or Gravel of the Bladder and Kidneys.

For literature see "The Therapist," Vols. I. and II., published by Aug. Siegle, 30 Lime St., London, E.C.

PIPERAZINE may be obtained in Crystals wholesale at **17/6** per oz. net, or in 1-GRAMME COMPRESSED TABLETS, pure, without any admixture, Schering's own manufacture, at **7/6** per dozen gramme Tablets.

Minimum Dose—1 Gramme or 15 Grains per day in a Pint of Water.

This may be divided into two or three portions during the day.

PHENOCOLL HYDROCHLORIDE

(PATENT).

NON-TOXIC, AND HAS NO EFFECT ON THE HEART.

This is a preferable analgesic having no toxic effects, nor does it interfere with the circulation of the blood, nor the heart, nor does it reduce the temperature below normal.

Is indicated in all cases accompanied by feverish symptoms, particularly in Rheumatism, Neuralgia, and similar ailments.

MALARIAL FEVER YIELDS TO NO OTHER REMEDY SO WELL.

For literature refer to "The Therapist," Vols. I. and II., published by Aug. Siegle, 30 Lime St., London, E.C.

To be obtained Wholesale at **3/6** per oz. net.

APPLY TO THE WHOLESALE DRUG TRADE.

Wholesale Agents:

A. & M. ZIMMERMANN, 6 & 7 CROSS LANE, LONDON.

BARCLAY & SONS, LIMITED.

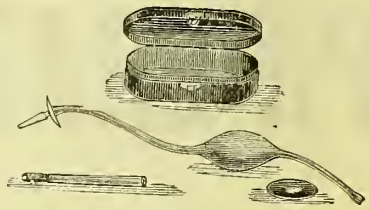
SEAMLESS ENEMAS.

RELIABLE QUALITY.

BEST ENAMELLED (Black only).
In Oval Cloth Boxes, complete, per doz. .. 33/-
In Cedar Boxes " " .. 29/-

BLACK SEAMLESS SHAPE
(Not Enamelled).
In Cedar Boxes, complete, per doz. 24/-

"HYGIENIC" ENEMAS
(Black), with Flexible Pipe.
In Oval Cloth Box, per doz. 30/-



95 FARRINGDON ST., LONDON, E.C

HARROLINE PILLS.

The Great Harrogate Tonic.

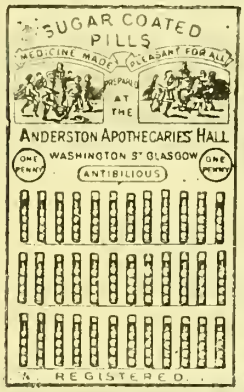
An unfailing Cure for **Poverty of Blood, Anæmia, Chlorosis,** and every form of Debility arising therefrom.

1s. 1½d. and 2s. 9d.

WHOLESALE FROM THE
HARROLINE PILL CO.
HARROGATE.

FULL PARTICULARS & TERMS ON APPLICATION

1D. PILLS!! SUGAR-COATED!! 1D. PILLS!!



Medicine made pleasant for all.

The Cheapest and Best Family Medicine The most Saleable Article in the Market Composed of the purest Drugs. Will keep good in all Climates any length of time.

The following varieties are put up in Glass Tubes, on Cards of 3 doz., or in gross boxes, at one penny per tube :—

Antibilious	Hamilton
Asafœtida	Liver
Blaud	Podophyllin
Castor Oil	Quinine
Colocynth	Rhubarb
Dandelion	Tonic
Female	Vegetable, &c.

Other varieties can be had if required. Terms—7s. per Gross, cash; 6 Gross assorted, in handsome mahogany glass case for 42s. Sent free by parcel post on receipt of P. O. Order or Postage Stamps. Agents and Purchasers of large quantities get a liberal discount. *Send for Sample.*

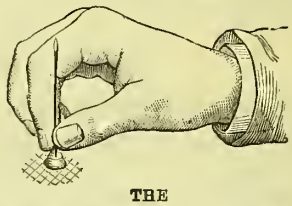
Aromatic Cachous, Chlorate of Potash Pellets and other varieties put up as above at same price.

AGENTS WANTED.—APPLY AT THE
Anderston Apothecaries' Hall, Washington St., GLASGOW
Telegraphic Address—"Lilimatian Glasgow"

A CHEMIST wanted in every town to represent SAUTER'S "**STAR**" ELECTRO HOMŒOPATHIC REMEDIES. Already sold and employed by OVER 600 CHEMISTS.

TERMS ON APPLICATION TO
MANAGER, CENTRAL DEPOT (for the English speaking world)
OXFORD RD., GUISELEY, NEAR LEEDS.

Trade Mark.



Registered.

THE
ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH
12x PALL MALL EAST, LONDON, S.W.
SOLE AGENTS FOR
DR. WARLOMONT'S CALF VACCINE.
Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.

HUMAN VACCINE, from healthy children only, microscopically examined and source noted. Tubes two-thirds full, 1s. 8d. each; Tubes one-third full 1s. each; Tubes two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged. 1s. per dozen. Vaccine Ejectors, 1s. 3d. each, including postage. P.O.O.s (including postage, and crossed London and Westminster Bank) with orders, payable to
EDWARD DARKE, *Secretary.*
Office hours, 10 to 4. Saturdays 10 to 2.

WINTER SEASON, 1892-3.

FAMILY REFERENCE ALMANACK
1893.

Chemists may be supplied with the above popular Annual with their names, &c., on the cover, free of charge, on writing to Messrs. KAY BROTHERS LIMITED, and *undertaking their distribution from house to house as soon as received.* Also 1,000 bills for counter use, with name and address, *if asked for.* Enclose two (2) labels for correct address, with population of the district and best means of conveyance, *under cover* (*labels on post-cards being contrary to regulations*), *addressed "Advertisement Department," at earliest convenience.* The Almanacks will be sent direct from the printer, with counter bills, show-cards, &c., if required.

TRADE **"COAGULINE"** MARK.

Kay's New Transparent Cement for Broken Articles.

"Clear as Crystal," "Stronger than Glass," "Tough as Leather," 6d., 1s., 2s., in Boxes, or on Cards.
Show-cards, Handbills, with name, &c. Specimens, &c., for home, or export, free.

KAY'S COMPOUND

Essence of Linseed, Aniseed, Senega, Squill, Tolu, &c.
9½d., 13½d., 2s. 9d., &c.

KAY BROTHERS LIMITED.

LABORATORY AND WORKS:
ST. PETERSGATE MILLS, STOCKPORT.

MARTINDALE'S
NITROGLYCERINE TABLETS.

These are preferred to the alcoholic solution, being in accurately divided doses, and in a perfectly safe, stable, and portable form. If kept dry they will keep for years in any climate. In Boxes, Retail; 2/6 and 4/6 each.

For export to hot climates, corresponding quantities are sold in Bottles. For Hospitals and Dispensing, in Bottles. 2-oz. 4-oz., 8 oz. Wholesale quantities, 22/6 per lb. Bottle, subject to usual terms.

MARTINDALE'S GLASS CAPSULES OF NITRITE OF AMYL, IODIDE OF ETHYL, BROMIDE OF ETHYL, AND CHLOROFORM encased in cotton wool and silk. Retail 2/6 per box.

COCAINE PASTILS for allaying irritation of the Throat.

COCAINE AND MORPHINE COUGH PASTILS.

CASCARA SAGRADA PASTILS. COCA PASTILS as restoratives.

MARTINDALE'S PORTABLE INHALER for inhaling medicated moist air.

MARTINDALE'S POOR MAN'S INHALER. A cheap form of the above.

MARTINDALE'S OZONIC INHALER for dry inhalation.

MARTINDALE'S NASAL OZONIC INHALER.

PEPTONISED BEEF SUPPOSITORIES for rectal alimentation.

MARTINDALE'S GRANULAR EFFERVESCENT SULPHATE OF SODIUM, PHOSPHATE OF SODIUM, SODIO-MAGNESIAN APERIENT, ANTIPYRINE, PIPERAZINE, and other salts.

DRIED MOSS compressed into sheets. Antiputrescent, and absorbent of discharges.

W. MARTINDALE, 10 NEW CAVENDISH STREET, Pharmaceutical Chemist, PORTLAND PLACE, LONDON, W.

Address for Telegrams, "BOLLAND LONDON."

HODGKINSONS, TREACHER & CLARKE,

ESTABLISHED UPWARDS OF A CENTURY.

WHOLESALE AND EXPORT DRUGGISTS

101 WHITECROSS STREET LONDON E.C.

ESSENTIAL OILS. PEARL COATED PILLS. CHEMICALS. TINCTURES IN BOND.

Manufacturers of Pharmaceutical Preparations

PRICE CURRENT AND TERMS ON APPLICATION.

Trade Mark T&K Registered

TYPKE & KING

CHEMICAL MANUFACTURERS,

22 LAURENCE POUNTNEY LANE, LONDON, E.C.

Works—MITCHAM and RAINHAM.

Telegraphic Address, "Valerianic London." Telephone No. 11402.

Trade Mark T&K Registered

SPECIALITIES—

ACIDS—Pure Hydrochloric, Nitric, Phosphoric, s.g. 1,750 and 1,500, Sulphuric and Valerianic.

ANTIMONY—Crocus, Sulphide, Golden Sulphuret, and all Antimonial preparations.

AMMONIA—Liquid, ·880, Nitrate, and Valerianate pure dry Crystals.

ESSENCES—Apple, Pear, Pineapple, Raspberry, and Strawberry.

HYPOPHOSPHITES—Baryta, Iron, Lime, Magnesia, Manganese, Potash, and Soda.

All **CHEMICALS** for **ANALYTICAL, PHOTOGRAPHIC, AND PYROTECHNICAL PURPOSES.**

51

BEECHAM'S TOOTH PASTE.

All Chemists, Druggists, and Stores should Stock this new article, which is being well advertised, and, as it is a really good speciality, will shortly be in great demand. It is put up in collapsible tubes, retail price **1/-**, and can be obtained from any Wholesale House.

BEECHAM'S PILLS

The most saleable Patent Medicine in the market.

In Boxes 9½d., 1s. 1½d., and 2s. 9d. each.

HOME RETAILERS desirous of exhibiting Iron Tablets, Showcards, or Dummies, and wishful to have a good supply of Handbills, Beecham's Oracles, Music, &c., are requested to notify their requirements to the Proprietor,

THOMAS BEECHAM, St. Helens, LANCASHIRE.

UNIQUE. The UNIQUE.

NORWICH EXTRACT OF MALT AND COD LIVER OIL

Is totally unlike Foreign Brands; it will keep in all climates and seasons, and is very pleasing to the palate.
Chemist and Druggist says:—"It is a well-made preparation of exceptionally good flavour.

Manufactured by **J. ROBINSON & CO., NORWICH, ENGLAND.**

Supplied to the Trade at 12/-, 24/- and 48/- per doz. Wholesale Agents in London: Messrs. Barclay & Co. and Messrs. Sutton & Co.

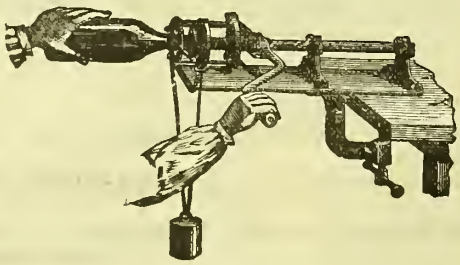
PERFUMES
OF THE HIGHEST CLASS.
BULK, 10/- per lb.
In ½-oz., 1 oz., 2-oz. LUNDBORGS, with sprinklers, and tastefully finished, 4/-, 7/6, 15/- per dozen.
10 per cent. discount for cash with order.

WILLIAM BLEASDALE & CO., YORK.

SPT. ÆTHER NIT.
COD LIVER OIL
(JAEGT BRAND).
CRUSHED LINSEED.
Lists, Samples, and Prices on application

NEW CAPSULING MACHINE

The only Machine which leaves no crease or pleat on the Capsule.



Can be fixed to any Counter.
A single pull of the lever is sufficient to fix the Capsule.

[1]

Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.C.

52

IPECACUANHA "TABLOIDS."

Despite the continued advance in the price and the very firm market in Ipecacuanha Root, we do not intend to make any changes in the prices of "Tabloids" of compressed Ipecacuanha. Ipecac. "Tabloids," 1/10 gr. and 5 grs., supplied to the Trade in bottles of 100 at 8*s.* 6*d.* and 16*s.* per dozen.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

AN ALTERATION will be made in the putting-up of MÖLLER'S COD LIVER almost immediately, by the adoption of CARTOONS or CARDBOARD BOXES; and Chemists who have any "go" and some Stock should apply for and obtain some of these Handsome Covers, and so secure their share of the increased sales which are sure to follow. The elegant Photo-lithographs can also be had of PETER MÖLLER, 43 Snow Hill, E.C. N.B.—The Patent Oil does not require a P.M. Stamp.

PAPAÏN

(DR. FINKLER & CO.).

A purely Vegetable ferment from the juice of the Carica Papaya. It is obtained by a special process, and is not merely the dried juice. It is superior to best Pepsine and Pancreatine, as it combines the digestive action of both.

Numerous reports by the leading English and Foreign Medical Authorities, Hospitals, and Institutions testify to its

ABSOLUTE THERAPEUTIC EFFICACY, PURITY, and UNIFORMITY.

(*Vide* Pamphlets and opinions of the Medical Press.)

PAPAÏN (Dr. Finkler & Co.) is sold as

POWDER, PILLS, LOZENGES, TABLETS,

LIQ. PAPAIN et Acid. Glycerine.
" " " Bismuth.
" " " Casc. Sagrada.
" " " Iridin.

Normal Dose of Two Grains in each Pill, Lozenge, and Tablet, and in each fluid drachm of the Liquors.

In prescribing, please add Finkler *in brackets.*

SOLD BY ALL WHOLESALE DRUGGISTS AND RETAIL CHEMISTS, and where not obtainable apply direct to

Samples and Literature free to the Medical Profession by applying to **B. KÜHN,** Sole Consignee, 36 ST. MARY-AT-HILL, LONDON.

BARRON, HARVEYS & CO.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

BARRON, SQUIRE & CO., BUSH LANE,

and also the various Formulæ of the Special Preparations of

JAMES BASS & SONS, HATTON GARDEN,

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 28 years without deterioration.

O. BEREND & CO.

61 Fore Street, LONDON, E.C.

CHEMIST'S BUNSEN BURNERS.

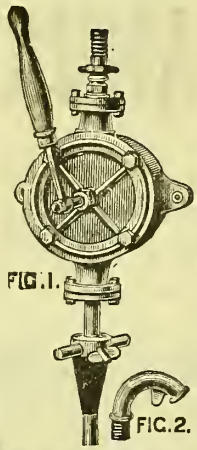
A Perfect Substitute for Gas.

More Portable, more Economical, than Gas.

Invaluable where there is no Gas, or where Gas cannot be used.

The most Perfect Bunsen Burner.

No Wick, Simple, Indestructible.



BUY THE BEST

OIL PUMP

AND SAVE

OIL, TIME, MONEY.

THOUSANDS IN USE.

Write for full particulars and prices of The "Farringdon" Patent Oil Pumps to

PONTIFEX & WOOD, LD.

Shoe Lane, LONDON, E.C.

WILEY'S CHEMICAL ESSENCE

FOR

LAMENESS IN HORSES.

HANDBILLS, WITH NAME & ADDRESS, SUPPLIED GRATIS.

50 YEARS' UNBROKEN SUCCESS.

SOLE MAKER AND PROPRIETOR, FRANCIS E. ROOKLEDGE, CHEMIST, EASINGWOLD, YORK.

TO BE HAD OF USUAL WHOLESALE HOUSES.

PETROLEUM JELLY.

PARAFFINUM MOLLE, B.P.

(PIONEER BRAND) Registered Trade Mark.

Equal to and Cheaper than VASELINE.

FOR MEDICAL AND PHARMACEUTICAL PURPOSES.

White, Yellow, Veterinary, and Waterproof. All kinds put up in 1-lb., 5-lb., 7-lb., 14-lb., 28-lb., and 56-lb. Patent Tins, and in 300-lb. Barrels.

Pure Castor Oil, Cod Liver Oil, White Mineral Oil, Best Eating Olive Oil, Pale and Crude Carbolic Acid, Carbolic Powders, Sheep Dip, Benzine 50 per cent. and 90 per cent., Crude and Rectified Spirits of Tar, Stockholm Tar, Camphor Ice, Carbon Candles.

PATENT

CARBOLIZED PEAT,

THE NEW AND POPULAR DISINFECTING POWDER.

SEND FOR SAMPLES AND PRICES TO

GRINDLEY & CO., Lim., POPLAR, LONDON, E.

(ESTABLISHED 1868.)

Now **DAVIS'S** Ready.

TOILET ALMANAC 1893.

PURSE AND POCKET SIZE. 32 pages, in beautiful Illuminated Wrapper. Chemists' own Specialities inserted.

BEST VALUE IN THE TRADE.

Send for Samples. JOHN DAVIS & CO. (Ltd.), Steam Printers, 201 OLD KENT ROAD, S.E.

DEUTSCHE GOLD- UND SILBER-SCHEIDE-ANSTALT,

FRANKFURT AM MAIN.

CHEMICALS

FOR PHARMACEUTICAL, PHOTOGRAPHIC, AND TECHNICAL PURPOSES.

SPECIALITIES.

NITRATE OF SILVER.
CHLORIDE OF GOLD.
CYANIDE OF POTASH.
PERMANGAN. OF POTASH.
CHROME ALUM.
ACETANILIDE.

Sole Agent—FRED^K. BOEHM, LONDON.

TASMANIAN

EUCALYPTUS OIL COMPANY.

TRADE MARK.

Obtained First Award and Gold Medal 1891-92. at the Tasmanian Exhibition. 1891-92.

DISTILLERS OF ABSOLUTELY PURE

OIL OF EUCALYPTUS GLOBULUS

From the Native "Blue Gum" Tree of Tasmania. Pure, fragrant, and of highest medicinal value, as shown by H. Helbing, F.C.S., and Dr. Passmore.

Put up in Bottles containing 1½, 4, and 8 oz., for Retailing at 1/-, 2/6, 4/6.

To be obtained of NEWBERY, MAY, ROBERTS & Co., and SUTTON.

For samples and Helbing's *Pharmacological Record*, write to the

LONDON OFFICES—

138 Leadenhall Street, E.C.

Telegraphic Address—"Eucalyptus London."

PARIS EXHIBITION, 1889.

PRIZE MEDAL AWARDED TO

"SALVO PETROLIA"

Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Manufactured by the Proprietors in Five distinct qualities—

WHITE, LEMON, YELLOW, GOLDEN, AND VETERINARY.

PACKED IN TINS, 1, 5, 10, 14, 28, 56, and 112 lbs. Also in 3-cwt. Casks.

"OLEUM DEELINÆ"

(REGISTERED).

UNIVERSALLY ADOPTED BY THE MEDICAL PROFESSION FOR

OPHTHALMIA, SCURVY, RINGWORM, ECZEMA, AND ALL SKIN-DISEASES.

For External and Internal Irritation of every kind.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles.

Pint Bottles, 4s. 6d. each, for Hospitals and Dispensing Chemists.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

"Edible Salvo Petrolia"

For Public Speakers, Actors, and Singers. 1s. 6d. per Tube.

The above are Manufactured Solely by the Proprietors,

THE DEE OIL COMPY.

LIMITED.

Works—SALTNEY, CHESTER.

OFFICES—

LONDON—38 LEADENHALL ST., E.C.

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff, Bristol, Belfast, Barrow-in-Furness, Nottingham, Paris, Hamburg, &c.

S. V. METH.

JONES & COMPANY,
COPPERFIELD ROAD
LONDON, E.
LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in 5-gallon quantities at Lowest Prices.

REDUCTIONS TO LARGE BUYERS.
SAMPLES FREE.

BOORD & SON,

DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,
ALLHALLOWS' LANE AND BARTHOLOMEW CLOSE, LONDON, E.C.

Quotations for **S. V. R.** Methylated Spirit and Finish on application.
FINEST ORANGE WINE FOR QUININE

JAMES BURROUGH

FINE PORT (without tannin)
FINE SHERRY (for Medicinal uses, &c.)
FINE MALAGA (for Steel Wine, &c.)
FINE BURGUNDY (for invalids)
S.V.R. *and Methylated Spirit at lowest present prices.*

CALE ST. DISTILLERY

All at Lowest Prices and specially recommended.

CHELSEA

THE RISING SUN STOVE POLISH

THE EASIEST, QUICKEST, CLEANEST, CHEAPEST, AND BEST Black Lead IN THE World.

RISIN' SUN LIQUID METAL POLISH

Gives to Metal Articles of every description, Gold, Silver, Copper, Brass, Steel, &c., also Glass, a Beautiful Soft Brilliant Polish, which lasts Six Times as long Without Tarnishing as other kinds.

BOTTLES 6½ 2d. NO LABOUR! NO MIXING!! NO SCRATCHES!!!

MACK'S DOUBLE-STARCH

Contains Starch Gloss, Borax, Gum, Wax, &c. Requires NO Addition or Preparation. Saves Time, Labour, and Uncertainty.

Produces BEAUTIFUL, WHITE GLOSSY LINEN.

CHANCELLOR'S *Plate Powder* · 3d. boxes

EASIEST, QUICKEST, CHEAPEST, BEST.

"Saves an immense amount of time and labour, and gives a brighter polish than anything else. There is no preparation of which we know to equal its excellence."—ENQUIRE WITHIN.

GOOD PROFIT GUARANTEED.—To prevent "Cutting," and secure to all a fair profit, all the Wholesale Houses dealing in this article throughout the country have agreed with the Sole Importers to quote "Rising Sun" Stove Polish for the future at Importers' Own Prices, and to supply only those who agree not to retail "Rising Sun" Stove Polish under fixed prices, which leave a good margin of profit. Conditions of Sale and Prices on application.

C. CHANCELLOR & CO., 3 CHARTERHOUSE BUILDINGS, **LONDON, E.C.**

AS A POLISH THE CLEANEST, BRIGHTEST, AND BEST.

PYN-KA

THE POLISHING TABLET (Unsurpassed). AWARDED GOLD MEDAL.

Cleans with a Brilliant Polish Brass, Copper, Silver, Gold, White and other Metal, Electroware, Glassware, and other domestic articles. For Restaurants, Hotels, Bars, and Bicyclists.

TESTIMONIAL FROM A LADY.—"Your 'PYN-KA' Sample is the best I have tried, and we shall use no other cleanin preparation in our house. It will, I am convinced, supersede all other Polishing Pastes."

For Wholesale Terms apply to the Sole Vendors— **THE PYN-KA SYNDICATE, LIMITED, 41 LORD ST., LIVERPOOL.**

JEYES' FLUID

THE NON-POISONOUS DISINFECTANT.

A TRUE GERMICIDE & DEODORISER,

Somewhat less refined than **CREOLIN**, the virtues of which are

RECOGNISED BY MEDICAL AUTHORITIES ALL OVER THE WORLD.

Jeyes' Fluid and its Preparations

SHOULD BE RECOMMENDED BY THE CHEMIST EVERYWHERE WHO DESIRES TO SUPPLY ONLY RELIABLE ARTICLES.

PRICE LIST
(ABBREVIATED).

Jeyes' Fluid.

Retail Prices. s. d.		Trade Prices. s. d.
0 6 ..	Sixpenny Bottles (bottles included)	4 0 per doz.
1 0 ..	Shilling " (bottles included)	7 0 "
3 6 ..	½-gall. Iron Drums (drums included) ..	2 6 each
6 0 ..	1-gall. Drums " " ..	4 6 "
11 6 ..	2-gall. " " " ..	8 6 "
28 6 ..	5-gall. " " " ..	20 0 "
55 0 ..	10-gall. " " " ..	38 6 "
Per gall.		
5 0 ..	20 and 40 gall. Casks (casks free, not returnable)	3 6 per gall.
1 1½ ..	UNIVERSAL PERFECT PURIFIER (in bottles) ..	8 6 per doz.

Sanitary Powder.

1 0 each	Canisters, in boxes of 1, 2, or 3 doz. ..	7 0 per doz.
0 6 "	" " " ..	4 0 "

(Also in Casks and Bags.)

Disinfectant (Brown) Soap or Household (White) Soap.

No. 1 QUALITY.—(In 1-lb. Bars, papered.)

Per cwt.		
31 6 ..	In 1-cwt. Boxes	28 0 per cwt.

(Also in Small Packages.)

No. 2 QUALITY.

Retail Prices. s. d.		Trade Prices. s. d.
25 6 ..	In 1-cwt. Boxes	22 0 per cwt.

(Also in Small Packages.)

Triple Milled Toilet Soaps.

Elegant Tablets for the Toilet, of finest quality, containing the Antiseptic Properties of "Jeyes' Fluid."

Per box.		
1 6 ..	Perfect Purifier, in Boxes of 6 Tablets.. ..	1 0 per box.
1 6 ..	Coal Tar, per Box of 6 Tablets	1 0 "
2 0 ..	Old Brown Windsor, in Boxes of 12 Tablets ..	1 6 "
2 6 ..	Toilet (Scented), in Boxes containing 6 Tablets	1 9 "
2 6 ..	Sublime Toilet (Unscented) in Boxes of 6 Tablets..	1 9 "
3 0 ..	Sublime Toilet (Scented)	2 0 "
2 0 ..	Boudoir Tablets (Perfumed), in Boxes of 3 Tablets..	1 4 "
5 0 ..	Transparent, Complexion, in Boxes of 12 Tablts	3 0 "

Toilet Preparations.

1 0 each ..	Tooth Powder, in Metal Boxes	7 0 per doz.
1 0 " ..	" Soap, " "	7 0 "
2 0 " ..	Dentifrice Water, in Bottles, with Sprinkler	15 0 "
3 6 " ..	Spray Diffuser, in Box complete.. ..	30 0 "

Sheep Dip, Wood Preserver, and other Agricultural Preparations.

TERMS, 2½ PER CENT. DISCOUNT AT ONE MONTH.

All Goods delivered Free in London. For the Country, Free at any London Railway Station or Wharf.

FULL PRICE LIST ON APPLICATION.

ALSO

A NEW MEDICAL PAMPHLET,

With Recent Opinions of English Medical Men, free on request.

JEYES' SANITARY COMPOUNDS CO. Ltd.

43 CANNON STREET, LONDON, E.C.

THE "STIPENDUM" STOPPER CO., LIM.

47 LAMB'S CONDUIT STREET, LONDON, W.C.,

Manufacture the following Specialities—

"STIPENDUM" CORK STOPPERS, in all sizes.
"STIPENDUM" CORK-LINED CAPS, for Pomade Bottles.
"STIPENDUM" SCREW CAPS, for Pomade Bottles.
"STIPENDUM" OPENERS, for Stoppered Aërated Water Bottles.

"STIPENDUM" GREASE-PROOF COVERED POTS

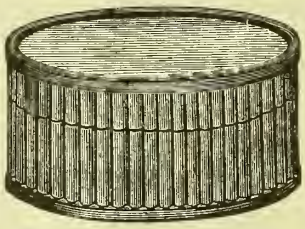
IN TERRA COTTA, CHOCOLATE, AND BLACK.

The **Grease-Proof Covered Pots** have perfectly fitting lids, are practically unbreakable, and the only article really answering the purpose intended.

The following Analytical Report should be noted by the trade:—

London, *January* 5, 1891.

"We have examined the two covered pots marked N vember 21, 1890, one containing strong nitrate of me ccry ointment, and the other iodine ointment, the object t e n to discover—(1) Whether the ingredients f w ich the pots are composed have in any way affected the ointments; (2) Whether the pots have been deteriorated by the action of the ointments.



We hereby certify that no trace of any of the ingredients of the pot can be discovered in either of the ointments, and further that the pots themselves were found not to have been acted on at all; and we further consider 'Stipendum' admirably adapted for such pharmaceutical preparations.

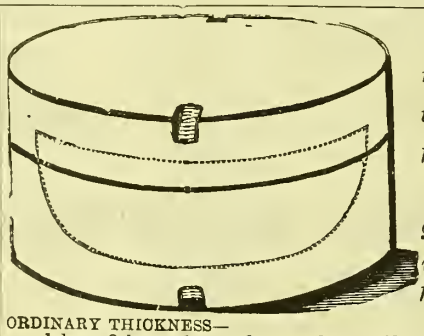
Signed, C. T. KINGZETT, F.I.C., F.C.S.
(Ex Vice-President Society of Public Analysist)
R. H. HARLAND, F.I.C. F.C.S.
(Public Analyst)."

To be had of all Druggists' Sundriesmen. Wholesale only of the Company.

WILLIAM TOOGOOD

TOOGOOD'S
IMPROVED PATENT
EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

	1 dr.	2 dr.	½	¾	1	1½	2	3	4	6	8 ounces.
ORDINARY THICKNESS—	1/6	1/6	1/6	1/8	1/10	2/-	2/3	2/10	3/6	4/6	5/6 per doz.
THIN FOR DISPENSING—	½	¾	1	1½	2	3	4	6	8 ounces.		
	1/7	1/9	2/-	2/2	2/5	3/-	4/-	5/-	6/- per doz.		

TOOGOOD'S BRONCHITIS KETTLES. *Write for New Season's List.*
TOOGOOD'S CHEST PROTECTORS. *Write for New Season's List.*
TOOGOOD'S INDIARUBBER HOT-WATER BOTTLES. Write for New Season's Lists.
TOOGOOD'S INHALERS. Write for Special List.

BURLINGTON BUILDINGS, HEDDON ST., REGENT STREET, LONDON, W.

SECOND SEASON.

FURFELT Solport Bros.

SOLPORT'S

"FURFELT"

CHEST PROTECTORS.

Made from the Softest Natural Undyed Lamb's Wool incorporated with the Fur of the Grey Coney, and adjudged by the Trade and its press to be

"AN IDEAL CHEST PROTECTOR."

N.B.—Buyers are cautioned to see that every Label bears our Registered Trade Mark as here figured.

PRICES:—

	No. 0	1	2	3	4	5	6	
Single ...	5/6	6/6	9/-	12/-	15/6	20/-	25/-	per doz.
Double ...	12/-	15/-	20/-	25/6	34/-	42/6	52/-	„
Vest Shape...	16/6	22/6	30/-	37/6	46/6	58/6	70/-	„

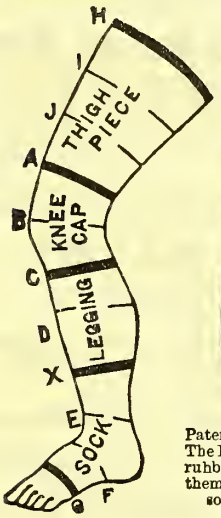
FURFELT Solport Bros.

SOLPORT BROS.

66 Shaftesbury St., New North Road,

LONDON, N.

AND OF ALL WHOLESALE HOUSES.



ELASTIC SURGICAL STOCKINGS, APPLIANCES, &c.

Patent Pile, Protected, 14,618. The Pile lying over the Indiarubber Cords, protecting them and forming a smooth soft surface to the limb.

LATEST NOVELTY.

NEW SUSPENSORY BANDAGE, THE "OCTOPUS."

Packed any way in Envelopes, Boxes, &c.

No one will wear the other shape after trying one of this kind.

The Band of this SUSPENDER being cut a peculiar shape, so as to fit parallel with the External Oblique Muscles, and Buckling on each side of the Purse, clings to the Body as firmly as an "OCTOPUS." It can also be adapted by the buckles to fit a wide range of sizes.

Registered, 185.228.

Fitted with Galvanic Discs, it is a most powerful INVIGORATOR.

It is specially adapted for Riding, Hunting, Lawn Tennis and Foot-hall Players, Cyclists, Pedestrians, and all kinds of Athletic Sports.

Handbook of my Manufactures will be forwarded to any Surgical Instrument Maker or Chemist free.

MAGNETIC BELTS AND APPLIANCES.

Elastic Surgical Stockings, Knee Caps, &c.
Patent Spiral Seamless Elastic Stockings, &c.
Patent Pile Surgical Elastic Stockings.
Elastic Supports for Lawn Tennis, Cricket, Lacrosse, and other Athletic Sports.

Bath and Rubbing Gloves.
Bathing Caps and Belts.
Trusses of every description.
Poro-plastic Jackets.
Chest Expanding Braces.

Bandages—Indiarubber, Elastic, Lint, Cotton, Sayres', &c.
Horse Ear Caps and Veterinary Appliances.
Suspensory Bandages.
Ladies' and Gentlemen's Belts.

Hot Water Bottles and Covers, Respirators, Inhalers, Bronchitis Kettles, Throat Sprays, Waterproof Coats, Cloaks and Driving Aprons, Footballs, Shin Guards, and Athletic Appliances, Druggists' Sundries, Invalid and Nursery Appliances, &c.

MANUFACTURER AND PATENTEE:—

J. H. HAYWOOD, *Surgical, Electrical, Athletic, and Veterinary Appliance Manufacturer,* **CASTLE GATE, NOTTINGHAM**

LONDON AGENT—GEORGE BARNSDALE, 44 ALDERMANBURY.

HORN & SON
OFFICES FOR BRITISH AND FOREIGN
PATENTS AND TRADE MARKS,
SOMERSET CHAMBERS, 151 STRAND, LONDON
(NEXT TO SOMERSET HOUSE).
Guide to New Patent Law and Registration gratis.

PRECIPITATED CHALK, WHITEST AND PUREST.
CHEAPEST SELLERS IN THE MARKET.
ALSO CHEMICALS, DRUGS, AND OILS.
APPLY TO
AUG. LEVERMORE & CO., 8 LIME STREET, LONDON, E.C.

HAND-PICKED GUM ARABIC.
Wholesale and Export Druggists before buying elsewhere should apply to
FREDK. FINK & CO.
10 & 11 MINCING LANE, LONDON, E.C.

HAKKA CATARRH, HAY FEVER, HEAD COLDS, ETC. CREAM
Price 2s. 3d.
REGISTERED. (2)
For Colds, Influenza, Hay Fever, Catarrh, &c.
Of all Wholesale Houses, or direct from Sole English Depôt,
A. P. BUSH & CO.
1 Greeham Buildings
LONDON, E.C.
SHOWCARDS, &c., on application.

ESTABLISHED OVER HALF A CENTURY.
G. F. COWARD & CO.
EXPORT DRUGGISTS AND PERFUMERS,
20 LITTLE BRITAIN, LONDON, E.C.
SPECIALITIES—Prize Medal Improved Seidlitz and other Powders, Essence of Jamaica Ginger, Camomile and Ginger, and Peppermint.

S. SAINSBURY'S
From English Lavender Flowers, and most choice and delicate Scents.
Lavender Water.
176 & 177 STRAND, LONDON.
Established 1839.
Wholesale and Shipping Terms on Application.

Contractors to H. M. Government and the Government of India.
Fletcher's Pino-Phenol Fluid Disinfectant.
Fletcher's Pale Carbolic Acid. 97-99 per cent.
Fletcher's Famous Fluid Sheep Dip.
☞ 40-GALLON CASKS AT SPECIAL RATES.
Fletcher's Carbolic Powders. 10 per cent. and 15 per cent.
Before buying elsewhere write for prices and samples.
FLETCHER BROTHERS & CO., GRIMSBY, ENGLAND.

BERNARD-ESCOFFIER FILS, GRASSE, FOR Oil of Almonds, Perfumed Waters, Lavenders, and all Essential Oils.
LONDON DEPOT—
LOUIS SCHLESINGER, WILSON ST., FINSBURY
Importer of MUSK, CIVET, AMBERGRIS, TONQUINOL, OTTO de ROSE, and every ESSENTIAL OIL.
Telegrams—"AMBERGRIS LONDON."
Established 1864.

MORISON'S PILLS,
POWDERS, AND OINTMENT.
WHOLESALE—
33 EUSTON ROAD, LONDON.

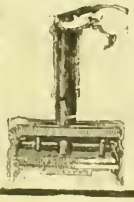
THE "MORSTADT" **Cachets**
Are the most digestible, flexible, and elegant Cachets in the market, and are fast replacing all competitors. The Cachets are made to hold from 3 to 18½ grains Quinine or Salicylic Acid.
"MORSTADT" CACHET CLOSING APPARATUS, to easily, cleanly, and speedily close 12 Cachets at one operation, from 12*s.* to 30*s.*
SMALL APPARATUS, to fill and close 1 Cachet at a time, 2*s.* 6*d.* each.
THOMAS CHRISTY & CO., 25 Lime St., London, E.C.

BURNS EMBROCATION
The favourite rubbing for Athletes, Cyclists, and Sportsmen.
1/1½, 2/9, and 4/6; 10/, 24/, and 40/- per dozen net.
Of all London Wholesale Houses, or direct from
H. BURN, 7 to 9 Gresham St., LONDON, E.C.
1 doz. 1/1½ sent carriage paid in United Kingdom for P.O. 10/.

ELKANAH NATALI,
SHOPFITTER and GLASS SHOW-CASE MAKER,
Removed to more Extensive Premises,
242 OLD ST. (only address),
Twelve doors from City Road, nearly opposite the old place.
A Large Stock of New and Second-hand Cases, &c., always in hand. No connection with any other house of the same name.
ESTABLISHED ABOUT QUARTER CENTURY.

A NOVEL IDEA. VERY PROFITABLE.
TOM BROOKS'S "SANOSCENT"
Is a Solid Perfumed Disinfecting Tablet, retaining its virtue for years. Exhales sweet, balmy odour. Eradicates Fleas and Moths. Each in a Japanese Basket. Retails 2*d.*, or 4 baskets in outer for 6*d.* Trade 12*s.* gross, ½ gross Carriage paid. Sample 2 doz., Post Free, 2/-.
TOM BROOKS, CHEMIST, HORNSEY, LONDON, N.

HUDSON'S HALF-MINUTE THERMOMETER,
Inland Post Free, **3/6.**
CLINICAL THERMOMETERS IN CASES
25/- per dozen. Trade Discount.
For Medical Press Opinions apply
HUDSON & CO.
OPTICIANS, PATENTEES, AND MANUFACTURERS,
5 Crosby Square, LONDON, E.C.


INDIARUBBER STAMPS
For all purposes and in all styles.
Self-Inking Stamps, as Illustration, from 2/ each.
Chemists' Prescription and Dating Stamp of all kinds, Brass Seals for Wax, Stencils, Dies, &c. Price and Pattern Sheets post free.
J. BERKLEY, 8 LIVERY ST., BIRMINGHAM.

PUREST CHLOROFORM
Guaranteed free from all injurious impurities. The Purest in the World.
SEND FOR ANALYSIS AND TESTIMONIALS.
SALAMON & CO., LD., CHEMICAL MANUFACTURERS,
RAINHAM, ESSEX.

S.V.R. In 40-gallon returnable iron casks, pure tinned, with screw bungs, interchangeable brass taps and spanners for opening. Farine, Dextrine, Glucose, Alcohol absolnt., Fusel Oil, Pear Oil, Lime-Soda-Lead-Acetates, Verdigris, Acetic Acid, Wood Naphtha, Charcoal, Ammonia liquid 880–900, anhydrous Sodium Sulphide, Bromides, Iodides, Chloralhydrate, Boracic Acid. Sulphate of Copper, Permanganate of Potash, Ol. Caryophyll., Menth. Pip., Pini, Juniperi.

HUGO LORENZ, 7, 8 Idol Lane, LONDON, E.C.

See "Chemist and Druggist," July 30, 1892, page 110.

RAYBOULD'S FURNITURE POLISH

BRIGHTENS FURNITURE WITH LITTLE LABOUR.

In Tins—1*d.*, 7/- gross. Stone Bottles—1*d.*, 8/- gross; 3*d.*, 2/- dozen; 6*d.*, 4/- dozen; 1*s.*, 7/- dozen. It is sure to please and increase your trade.

Every Chemist should send for Sample order, 6 dozen assorted as required, Carriage Paid, P.O.O. or Cheque, payable to

FLESHER RAYBOULD, REFORM WORKS, DUDLEY.

ESTABLISHED 1835.

DENTISTRY

Best Mechanical work from impressions or models. Care and promptitude may be relied on. Moderate charges, inclusive of materials.

FENTIMAN & CO., DENTISTS, 2 Upper East Smithfield, adjoining Royal Mint, London.

The above is the only Address.

PINCH & CO.,

MANUFACTURERS OF PATENT

GOUT CURE

(For Outward Application Only).

In Bottles, 1*s.* 1½*d.*, 2*s.* 9*d.*, and 4*s.* 6*d.* Wholesale and Export.

114 JAMAICA ROAD, LONDON, S.E.

NICHOLL'S BLOOD PILLS.

1/1½ 2/9 4/6

Wholesale of Messrs. Newbery & Son, Lynch & Co., Barclay & Sons, Edwards & Son, Sanger & Sons, Hovenden & Sons, London; Messrs. Evans, Liverpool; Messrs. Raimes & Co., York.

NICHOLL'S MEDICAL HALL, 25 HIGH STREET, BELFAST.

Bromley's Gout & Rheumatic Pills

Established 1807.

WILL CURE.

CHEAPEST. MOST PROFITABLE.

Not Sold under Price on Box.

FREE Printing of Chemists' own Bills.

Send Hand-bill or Labels.

46 Sir Thomas's Buildings, Liverpool, Eng.

EADE'S

GOUT and RHEUMATIC PILLS

Are the safest and most effectual remedy advertised for

GOUT, RHEUMATISM, AND ALL MUSCULAR PAINS.

GEORGE EADE, 72 GOSWELL RD., E.C.

Counter Bills and Show Cards on application.

DR. MACK'S

COUGH ELIXIR.

Prepared only by J. McGEARY,

194 Camberwell Grove, LONDON, S.E.

E. H. THIELLAY'S (Registered 1867)

EAU F. JOUVENCE, GOLDEN.

Producing Flaxen Golden Hair.

Gold Medal, PARIS, 1867. PHILADELPHIA, 1876.

This is a very superior article. In Bottles at 3/6, 6/-, & 10/-.

All Wholesale Houses, or direct from

E. H. THIELLAY,

Parfumeur-Chimiste, Amersham Park, New Cross, LONDON, S.E.

(Show Rooms at Charing Cross Hotel.) [3]

EUCALYPTUS OIL.

Genuine Australian Oil, pure, bright, and of a pale straw colour.

APPLY TO THE IMPORTERS,

FLETCHER, FLETCHER & STEVENSON

21 MINCING LANE, LONDON, E.C.

KREAT-HALVIVA.

MALARIA, INFLUENZA, FEVER, INDIGESTION, SEA-SICKNESS.

For sale at 2/9 a Bottle. Agents—All Wholesale Houses in England. Kemp & Co., Bombay; Elliott Bros., Sydney.

4 TEMPLE CHAMBERS, LONDON, E.C.

BRACHER'S

PATENT

"DESIDERATUM" MIXERS.

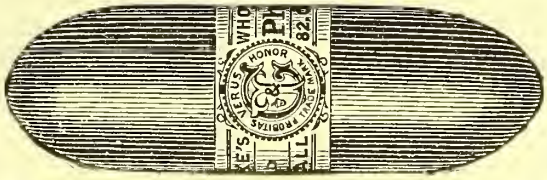
See large Advertisement, page 61, October 15.

WALKER, TROKE & CO.

WHOLESALE DRUGGISTS,

65 Bath Street, City Road,

LONDON, E.C.



SOLE MAKERS OF

GABRIEL & TROKE'S GELATINE CAPSULED HORSEBALLS

Alterative, Condition, Cordial, Cough, Diuretic, Fever, Physic, Worm, Quinine Tonic Balls (Registered 81,291).

QUOTATIONS & SAMPLES FREE ON APPLICATION.

THE ART OF DISPENSING.

This popular work treats of all the manipulative details involved in compounding medical prescriptions special attention being given to dispensing difficulties, and to notes on new remedies.

The Book contains 280 pages. Price 3s. 6d.; by post, 3s. 10d.

THE HANDY-BOOK OF MEDICINE STAMP DUTY.

This work has been written for us by Mr. E. N. Alpe, of the Solicitor's Department, Inland Revenue Office, Somerset House, who has had a wide experience in, and intimate knowledge of, the administration of the Acts which regulate the sale of proprietary medicines.

The most recent modifications in the law and practice relating to medicine stamp-duty are incorporated in a Supplement which has been added to this work.

Contains 142 pages, Price 2s. 6d.; by post, 2s. 9d.

VETERINARY COUNTER PRACTICE.

There is probably no development of the drug trade which has so much money in it potentially as the treatment of animals. It is to be an aid to chemists and druggists in providing them with advice regarding the diseases and treatment of the horse, cattle, sheep, and other animals, that we have had this "Veterinary Counter Practice" compiled; and we think the instances will be few indeed in which it will fail to pay for itself in the first week or two after purchase.

Nearly 300 pages. Illustrated. 3s. 6d.; by post, 3s. 9d.

A MANUAL OF PHARMACEUTICAL TESTING.

Comprising simple instructions for the Testing of the Chemicals of the British Pharmacopœia, &c., with such materials and appliances as are in common use at the dispensing counter. By Barnard S. Proctor, F.I.C.

The Book contains 176 pages. Price 2s. 6d.; by post, 2s. 9d.

PHARMACY AND POISON LAWS OF THE UNITED KINGDOM.

Indispensable to every pharmacist, and a necessary part of the technical education of every chemist's apprentice.

Price 2s. 6d.; post free, 2s 9d.

The Books named above are supplied at the published prices by the following firms:

Ayrton & Saunders, 149 Duke Street, Liverpool.
Barclay & Sons (Limited), 95 Farringdon Street, E.C.
Bleasdale, Wm., & Co., York.
Bolleau & Boyd, 91-93 Bride Street, Dublin.
Clay, Dod & Co., 52 St. Anne Street, Liverpool.
Duncan, Flockhart & Co., 104 S. Canongate, Edinburgh.
Edwards, Wm., & Son, 157 Queen Victoria Street, E.C.
Evans, Gadd & Co., 97 Fore Street, Exeter.
Evans, Lescher & Webb, 60 Bartholomew Close, E.C.
Evans, Sons & Co., 56 Hanover Street, Liverpool.
Ford, Shapland & Co., 6 Great Turnstile, High Holborn, W.C.
Glasgow Apothecaries Company, 32 Virginia Street, Glasgow.
Harris, Philip, & Co. (Limited), Birmingham.
Holmes, W. & R., 5 Dunlop Street, Glasgow.
Ismay, John, & Sons, Newcastle-on-Tyne.
Lennon, B. G., & Co., Port Elizabeth.
Lennon & Tebb, Cape Town.
Lewis, H. K., 136 Gower Street, W.C.
Lloyd, T. Howard, & Co., Leicester.
Maw, S., Son & Thompson, Aldersgate Street, E.C.
May, Roberts & Co., 9 Clerkenwell Road, E.C.
Newbery, F., & Sons, King Edward Street, E.C.
Newsholme, G. T. W., 74 Market Place, Sheffield.
Oldfield, Pattinson & Co., 17 Todd Street, Manchester.
Pinkerton, Gibson & Co., Edinburgh.
Potter & Clarke, Raven Row, Artillery Lane, E.
Raimes, Clark & Co., Edinburgh.
Raimes & Co., York.
Sanger, John, & Sons, 489 Oxford Street, W.
Silverlock, H., 92 Blackfriars Road, S.E.
Southall Bros. & Barclay, Birmingham.
Sutton, W., & Co., 76 Chiswell Street, E.C.
Thompson, John, Hanover Street, Liverpool.
Woolley, James, Sons & Co., Manchester.
Wyleys & Co., Coventry.

Published at the Offices of

"THE CHEMIST AND DRUGGIST," 42 CANNON STREET, LONDON, E.C.

POSITIVELY THE BEST HAIR DRESSING

FOR STRENGTHENING,
BEAUTIFYING, & PRESERVING THE HAIR.

EDWARDS'
"HARLENE"

World-renowned Hair Producer and Restorer.

ANOTHER HANDSOME SHOW-CARD

IN 15 COLOURS, FRAMED, NOW READY,

Will be sent, Carriage Paid, also Counter Bills, with Name and Address of Agent, on application.

NOTICE.

As no more Coupons will be issued by us, every Chemist should provide a stock of 3/6 and 5/6 bottles, to meet the coming demand.

SPECIAL TERMS TO BUYERS OF £2 10s. AND UPWARDS.

1s., 2s. 6d., 3s. 6d., and 5s. 6d. per Bottle, from Chemists, Hairdressers, and Perfumers all over the world.

MANUFACTURED ONLY BY

EDWARDS & CO., 95 HIGH HOLBORN, LONDON, W.C.

EXTRA HEAVY OVAL GLYCERINES.
Example : 4-oz. size, about 3 oz. liq. content.

PANELLED FLATS.

Telegraphic Address—"Fish London." Telephone 1365.

IN STOCK
IN
TINTED & WHITE FLINT GLASS.

DELIVERED DIRECT FROM WORKS IN
FINEST AMBER TINT
AT SAME PRICES AS FOR WHITE GLASS.

JOHNSEN & JÖRGENSEN.
OFFICES AND SHOW ROOM—
5 Savage Gardens, Tower Hill, E.C.
Warehouse—WEST INDIA IMPORT DOCK, E.

GLASS BOTTLES
GOOD AND CHEAP.
From Stock in London or direct from the Works.

THE NEW SHAPE FLATS,
with Rounded Edges; or the *Ordinary Shape.*
6 and 8 oz... .. .. 8/6 per gross.
3 and 4 oz... .. .. 7/6 „
Plain or Graduated.
These are highly recommended.

THE NEW SHAPE FLATS,
with Rounded Edges; or the *Ordinary Shape.*
Very Superior Quality. Crystal-blue Tinted.
6 and 8 oz. .. .. 10/- per gross.
3 and 4 oz. .. .. 9/- „
Plain or Graduated.

I. ISAACS & CO., Glass Bottle Manufacturers,
25 Francis St., Tottenham Court Rd., LONDON, W.C.
Established 50 Years. Bankers—London and Westminster Bank.

DISPENSING BOTTLES.
WEST LONDON DEPOT.
Established 1830.

Wholesale Merchants,
AND
CHEAPEST HOUSE IN LONDON.

JOHN P. BARRADELL & CO.
16 Paddington Green, LONDON, W.
PRICES ON APPLICATION.

S. MAW, SON & THOMPSON'S
No. 11
GUM BOTTLE
(REGISTERED NUMBER 183758),
Fitted with Brush complete
IN ½ DOZEN AND 1 DOZEN BOXES,
8/- PER DOZEN.
S. MAW, SON & THOMPSON, LONDON.

TANGYES' GAS ENGINE
'OTTO' PRINCIPLE. PINKNEY'S PATENTS
SINGLE ENGINES OF ALL SIZES FROM
¼ TO 146 ACTUAL OR 170 INDICATED HORSE-POWER
APPLY FOR ILLUSTRATED CATALOGUE TO
TANGYES LIMITED, BIRMINGHAM
London, Newcastle, Manchester, Glasgow, Sydney, Melbourne, Johannesburg, Genoa, Bilbao, and Rotterdam.

ESCHMANN BROS. & WALSH,
Inventors and Manufacturers of the
SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES

To be had of all Surgical Instrument Makers and Wholesale Houses.

To be had of all Surgical Instrument Makers and Wholesale Houses.

SUGAR OF MILK
(SYSTEM LANGEN).
Highly recommended by authorities. The only make of perfect purity in all respects.

AGENTS—
BURROUGHS BROS.,
66 Basinghall St., London, E.C.

SPONGE IMPORTERS.
M. PETERSON & CO.
(Established 1870),
75 ST. ANNE STREET, LIVERPOOL.
FOR HOME, FOREIGN, & COLONIAL MARKETS

COMMENCE THE SEASON

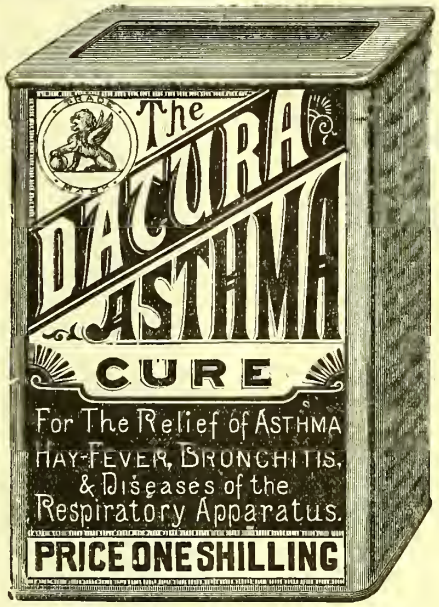
BY STOCKING

THE "DATURA"

ASTHMA CURE.

A splendid line at a reasonable price. Equal, if not superior, to the more expensive remedies. Guaranteed to give every satisfaction, and where well placed to produce a certain sale and steady trade.

PRICE—1/- Tins, 8/- per dozen.



This is undoubtedly the speciality of the Winter Season. It is well packed, and the Showcards and Pamphlets sent with all orders are of a high-class character. Once the "Asthma Cure" is sold it is its own advertisement.

PRICE—1/- Tins, 8/- per dozen.

The "Datura" Asthma Cure is a Compound Powder for inhaling purposes. Its composition is different to any on the market, and the influence the remedy exerts over the paroxysms of Asthma and other spasmodic coughs is of a very marked character. The relief given is immediate and lasting.

The "Datura" Asthma Cure may now be obtained through any Wholesale House at the above-mentioned price. The following Firms will keep stock, so that orders may be executed immediately:—Messrs. Newbery & Son, King Edward Street, E.C.; Messrs. Edwards & Son, Queen Victoria Street, E.C.; Messrs. Barclay & Son, Farringdon Street, E.C.; Messrs. Bourne, Johnson & Latimer, Furnival Street, E.C.; Messrs. Sutton & Co, Chiswell Street, E.C.; Messrs. Raimes & Co., York; Messrs. Goodall, Backhouse & Co., Leeds; Messrs. Raimes, Clarke & Co., Edinburgh; Messrs. Oldfield, Pattinson & Co., Manchester; Messrs. W. Foggitt & Son, Thirsk.

PROPRIETORS:

POTTER & CLARKE

WHOLESALE BOTANIC DRUGGISTS,

5, 6, and 7 RAVEN ROW, ARTILLERY LANE, E.

HOMŒOPATHIC MEDICINES

SPECIAL TERMS

CONTRACTS made with large buyers of Homœopathic Medicines by the year.

A great saving made by these Special Terms. Write for them

ALMANACS AND PRICE LISTS

All Buyers who publish PRICE LISTS AND ALMANACS should write for KEENE & ASHWELL'S special "CONTRA" terms.

ALL **1/-** TINCTURES AND PILULES, INTERNAL AND EXTERNAL, CAMPHOR PILULES, AND CAMPHOR TINCTURES AND ESSENCE,

3/6 PER DOZEN.

SPECIAL TERMS TO LARGE BUYERS.

A SERIES OF THESE HANDSOME MAHOGANY

"HAHNEMANN" CASES,

(AS ILLUSTRATED)

From **3 : 3 : 0** to **21 : 0 : 0**

PRESENTED GRATIS

With Opening Order to value of contents.

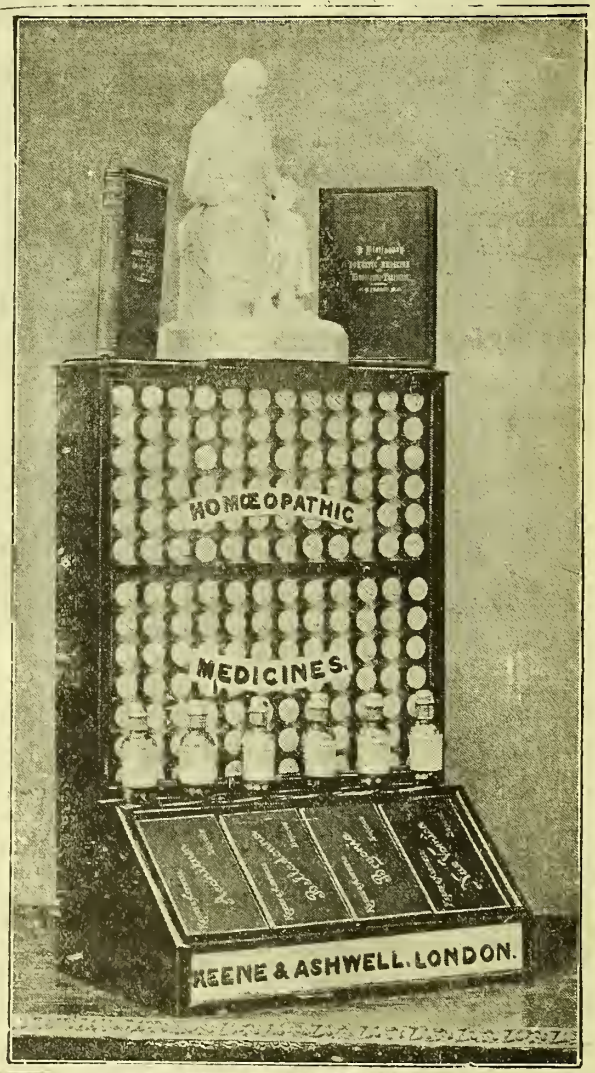
Every Chemist should have one. Being of best workmanship in mahogany they are a handsome fitting, beside being the most profitable of all sundries.

Contains only saleable Stock, therefore no risk of unsaleable Goods.

The **3 : 3 : 0** "Hahnemann" Case, as illustrated, contains 18 doz. 1/- assorted medicines. Realises at Retail Prices, 10 : 16 : 0, giving a nett profit of 7 : 13 : 0.

Dimensions: 25 inches high, 16½ inches wide.

Send for our new illustrated List of "Hahnemann" Showcases.



KEENE & ASHWELL,

(Successors to HEADLAND & CO., LONDON.)

THE OLDEST-ESTABLISHED HOMŒOPATHIC CHEMISTS IN THE KINGDOM,

74 NEW BOND ST., LONDON.